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ABSTRACT

This directory lists the institutions that provide full-time postgraduate courses in public health lasting at least one academic year. Other institutions, such as schools of medicine, that have a department of public health or community health offering postgraduate programs in public health are also included. A total of 216 institutions in 54 countries are represented. This directory is intended primarily for administrators and educators in the health field and for health personnel interested in building upon their background of knowledge in public health by undergoing further graduate and postgraduate training. The basic postgraduate public health courses offered in each country are described, as well as other related courses, and particulars are given of the institutions where they are available. Information is included on: admission requirements, curriculum, student assessment, and qualification requirements. (CB)

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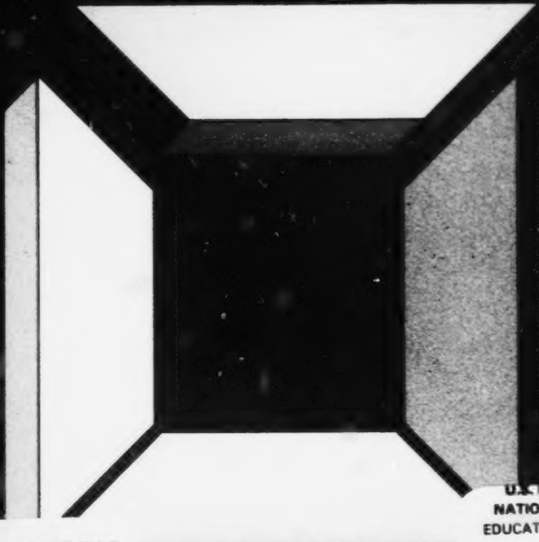
World Directory of Schools of Public Health

and

Postgraduate Training Programmes in Public Health



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Geneva

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The World Health Organization is a specialized agency of the United Nations with primary responsibility for international health matters and public health. Through this organization, which was created in 1948, the health professions of some 165 countries exchange their knowledge and experience with the aim of making possible the attainment by all citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life.

By means of direct technical cooperation with its Member States, and by stimulating such cooperation among them, WHO promotes the development of comprehensive health services, the prevention and control of diseases, the improvement of environmental conditions, the development of health manpower, the coordination and development of biomedical and health services research, and the planning and implementation of health programmes.

These broad fields of endeavour encompass a wide variety of activities, such as developing systems of primary health care that reach the whole population of Member countries; promoting the health of mothers and children; combating malnutrition; controlling malaria and other communicable diseases including tuberculosis and leprosy; having achieved the eradication of smallpox, promoting mass immunization against a number of other preventable diseases; improving mental health; providing safe water supplies; and training health personnel of all categories.

Progress towards better health throughout the world also demands international cooperation in such matters as establishing international standards for biological substances, pesticides, and pharmaceuticals; formulating environmental health criteria; recommending international nonproprietary names for drugs; administering the International Health Regulations; revising the International Classification of Diseases, Injuries, and Causes of Death; and collecting and disseminating health statistical information.

Further information on many aspects of WHO's work is presented in the Organization's publications.

IMPORTANT NOTE

The World Health Organization has no authority to grant any form of recognition or accreditation to schools for the training of health personnel. Such a procedure remains the exclusive prerogative of the national government concerned. Consequently, no institution listed in this Directory is recognized or accredited by, or its training programme endorsed by, the World Health Organization. The lists of names and addresses were compiled from data received from, or confirmed by, Member States. The Organization cannot therefore accept responsibility for the inclusion or the omission of the names of any institutions.

WORLD DIRECTORY OF SCHOOLS OF PUBLIC HEALTH

and

Postgraduate Training Programmes in Public Health

THIRD EDITION

WORLD HEALTH ORGANIZATION

GENEVA
1985

1st edition, 1968
2nd edition, 1972
3rd edition, 1985

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CONTENTS

Page
Introduction and explanatory notes 7

Details of systems of postgraduate education in public health and lists of institutions, by country:

Page
Argentina 13
Australia 16
Bangladesh 19
Belgium 22
Benin 28
Brazil 30
Bulgaria 33
Burma 36
Canada 38
Chile 42
China 45
Colombia 49
Cuba 52
Czechoslovakia 54
Denmark—see entry for Sweden
Egypt 57
Ethiopia 62
Finland—see entry for Sweden
France 64
Germany, Federal Republic of 69
Ghana 72
Greece 74
Hungary 75
Iceland—see entry for Sweden
India 77
Indonesia 87
Iran, Islamic Republic of . . 90
Ireland 94
Israel 96
Italy 98
Japan 103

Page
Lebanon 105
Malaysia 107
Mexico 109
Netherlands 111
Nigeria 115
Norway—see entry for Sweden
Pakistan 118
Peru 120
Philippines 122
Poland 125
Portugal 128
Republic of Korea 130
Singapore 133
Spain 135
Sudan 137
Sweden 139
Switzerland 141
Thailand 143
Turkey 145
Uganda 150
Union of Soviet Socialist Republics 152
United Kingdom of Great Britain and Northern Ireland 156
United Republic of Tanzania . 162
United States of America . . 164
Venezuela 173
Viet Nam 176
Yugoslavia 178

Annex 1. Subjects included in the courses offered at the institutions providing postgraduate education in public health 185

Annex 2. Numbers of institutions providing postgraduate education in public health: comparative list by country 188

INTRODUCTION

The third edition of the *World Directory of Schools of Public Health and Postgraduate Training Programmes in Public Health* lists the institutions that provide full-time postgraduate courses lasting at least one academic year. Other institutions, such as schools of medicine, that have a department of public health, community health, or the like, offering postgraduate programmes in public health, are also included even though they may not be schools of public health as the term is ordinarily understood. The number of such institutions is substantial, amounting to more than half the total number listed in the *Directory*. Institutions offering only undergraduate courses in public health and institutions offering only advanced courses in specialized fields are not included.

The first edition of the *Directory*, published in 1968, listed 100 institutions in 42 countries; the second, published in 1972, listed 121 institutions in 44 countries; the current edition lists 216 institutions in 54 countries. The increase in the number of institutions listed is the result of new schools having been established in countries where none existed previously, as for instance in some countries of the WHO Region for Africa, and of postgraduate programmes in public health having been introduced by existing institutions.

The *Directory* is intended primarily for administrators and educators in the health field, and for health personnel interested in building upon their background of knowledge in public health by undergoing further postgraduate training. The basic postgraduate public health courses offered in each country are described, as well as other related courses, and particulars are given of the institutions where they are available. The country texts also contain some general information on the curricula of the basic postgraduate public health courses (see *Explanatory Notes* below).

The subjects included in the curricula differ from institution to institution, from course to course, and from one year to another. In spite of the variations, which have occurred because of historical, political, and cultural developments and the need to adapt the components of each course to local conditions and priorities, there are core subjects common to almost all postgraduate public health courses. Annex 1 presents the results of an analysis of the core programmes of the various institutions and indicates the subjects most frequently included within them. It also presents a review of the principal types of elective subject, from among which most institutions require their students to select a certain number. A note is included on the teaching/learning methodology used at the various institutions. For details of the programme offered by a specific institution application should be made to the institution authorities at the address shown in the *Directory*.

The material presented in the *Directory* is based on answers to a questionnaire designed by WHO and distributed to the various institutions through the WHO Regional Offices. Before publication the individual country texts were sent to the relevant governments for approval. Nevertheless, in a work of this kind it is impossible to guarantee the complete accuracy of all the data. Details of any errors detected should be sent to the Division of Health Manpower Development, World Health Organization, 1211 Geneva 27, Switzerland. Information on any new postgraduate courses in public health, lasting at least one year, that are not mentioned, would also be welcomed.

Since the publication of the second edition of the *Directory*, the Member States of the World Health Organization have unanimously endorsed the Declaration of Alma-Ata, which invited all governments to formulate national policies, strategies, and plans of action to launch and sustain *primary health care* as the key to the attainment, by all peoples of the world by the year 2000, of a level of health that will permit them to lead a socially and economically productive life.[1] Primary health care thus appears as a new approach in aiming at an ambitious public health target. As the concept of primary health care can be understood only if it is viewed within the context of health services and manpower development as a whole, involving health care at different levels—primary, secondary, and tertiary—it must influence the roles, activities, and tasks of health teams working at each one of those levels.

In many instances there must be a rethinking in regard to the entire health care delivery system, with primary health care as the basis on which the pyramids of health services and health personnel are reorganized. The total coverage of the population by basic services, the involvement of communities in solving their own priority problems, the greater contributions of sectors other than the health sector to activities that influence the health status of the population, the placing of emphasis on preventive care, and a more even distribution of health resources, are among the aims that form part of the primary health care approach. This approach has to be learnt, and the new roles for each category of health staff defined, particularly for physicians and nurses, who will often have to assume responsibilities as leaders. The schools of public health have a crucial role to play in assisting those responsible for the health services and for health manpower to make the changes necessary to enable them to face the challenge before them. This edition of the *Directory* shows how that role has evolved, and it is hoped that future editions will illustrate further evolution towards the achievement of health for all by the year 2000.

Explanatory Notes

The information contained in this edition of the *Directory* refers to a period extending from 1979 to 1984, depending on the country concerned. The countries are listed in alphabetical order, and the text for each country is divided into the following 6 parts:

1. General information

General information is given on the institutions that provide postgraduate education in public health, their relationship to academic or other authorities, and the sources of their finances. The periods covered by the academic year and the languages of instruction are also given.

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[1] World Health Organization. *Alma-Ata 1978: primary health care*. Geneva, 1978 ("Health for All" series, No. 1).

2. Courses offered

The basic postgraduate public health course—e.g., Master of Public Health, Diploma in Public Health, Master of Community Medicine—is listed, as well as related courses. The duration of each course is indicated when it is known.

3. Conditions of admission

The information given in this and subsequent sections relates primarily to the basic postgraduate public health course, though certain information on other courses may also be provided. The entrance requirements for national students are given in detail, together with the conditions of admission for foreign students where applicable. When tuition fees are charged the amount is stated when it is known (in the national currency or, in some cases, in United States dollars for foreign students).

4. Curriculum

Information is given on the design of the curriculum, its relevance to the community health problems of the country, and the different teaching methods used. Special features of the curriculum are noted, including whether or not the management of health services based on primary health care is taught.

5. Assessment of students

The methods used in the assessment of the students' performance are described, and other requirements for the award of the degree, such as a satisfactory record of attendance, are noted. Where formative assessment takes place during the course, this is indicated, as is the composition of the examining body.

6. Qualification

Information is given as to whether a degree or diploma in public health is required for particular posts in the country's health services or academic institutions.

* * *

At the end of each country text there is a table listing alphabetically the institutions in that country providing postgraduate training in public health (1) by city (except in the case of Brazil, China, India, the Union of Soviet Socialist Republics, and the United States of America, for which they are listed first under the state, province, or republic and then under the city;

and the United Kingdom, which has been subdivided into England and Wales, and Scotland);[1] and (2) by institution.

The following explanation, which deals with each column of the tables in turn, gives an indication of the symbols used and the systems adopted in their compilation:

Column 1 — Name and address

The names and addresses of the institutions are in the language of the country concerned, unless that language does not use the Roman alphabet, in which case an English version is given. The names and addresses of institutions in the Union of Soviet Socialist Republics are transliterated in accordance with the system recommended by the International Organization for Standardization. For certain other languages, a translation of the name of the institution is added in English or French in brackets. The letters G, I, or S after the name of an institution indicate that its learning objectives have been explicitly defined in writing and that they are either *general* (G)—i.e., the principal functions a graduate in public health may be expected to assume; *intermediate* (I)—i.e., the various activities that make up each function; or *specific* (S)—i.e., the precise tasks involved in each activity.

Column 2 — Year public health course started

The year in which the public health course was first given at the teaching institution. It does not necessarily correspond to the date of foundation of the institution itself, or to the year in which other courses started.

Column 3 — No. of teaching staff

The number of persons officially connected with the institution as teachers, regardless of faculty rank. An attempt has been made to classify the teachers according to whether they work full time (ft) or part time (pt). *Full time* refers to a person who is a staff member of the institution, deriving all or most of his professional income from his teaching and other activities at the institution. *Part time* refers to a person who may engage in professional activities outside the institution, and whose professional income is not derived solely from his teaching activities at the institution.

Column 4 — No. of students in all courses

The total number of students in the courses listed in the text under *Courses offered*; not only the number of students taking the basic public health course. Wherever they are known, the numbers of male (m), female (f), national (N), and foreign (F) students are given separately.

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[1] There is no institution offering postgraduate training in public health in Northern Ireland.

Column 5 — No. of students in the basic public health degree/diploma course

Solely the number of students taking the basic public health course.

Two dots (. .) indicate that no information is available; a dash (—) that the school is new and the relevant data are not yet available.

* * *

For the sake of convenience the masculine gender has been used throughout in the narrative sections of this *Directory*, though the statements apply equally to men and women, except when the contrary intention is evident from the context.

Argentina

General information

In Argentina, postgraduate training in public health is available at the School of Public Health, Buenos Aires and the School of Public Health, Córdoba. The two institutions are attached to the Faculties of Medicine of the Universities of Buenos Aires and Córdoba, respectively, which are State-owned and financed, enjoying a large degree of autonomy under the general jurisdiction of the Ministry of Education. The chief executive officers of the universities are the rectors, who are assisted by elected governing councils (*consejos superiores*) consisting of the deans and other faculty representatives; the institutions are headed by directors.

The institutions are engaged in various activities, such as teaching, research, and consulting services, and collaborate with other training institutions, such as schools of nursing and nutrition. To facilitate the work of their technical services there are specialized libraries and translation and graphics units.

The academic year begins in March and ends in December. The language of instruction is Spanish.

The Escuela Superior de Sanidad "Dr Rámon Carrillo", Universidad Nacional del Litoral, Salvador Caputto 3353, 3000 Santa Fe, which was founded in 1947, currently offers postgraduate diploma courses in hospital administration and occupational health, as well as various short courses in public health. Its diploma course in public health, offered for some years, was suspended for lack of demand.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (*Diploma en Salud Pública*); the course lasts for 10 months and is offered at both institutions.

(2) Certificate in Epidemiology; the course lasts for 4 months.

(3) Certificate in Hospital Administration; the course lasts for 4 months.

(4) Certificate in Planning, Programming and Evaluation; the course lasts for 4 months.

(5) Certificate in Public Health Administration (for administrative officials with undergraduate training); the course lasts for 4 months.

(6) Certificate for Health Statisticians; the course lasts for 10 months and is for intermediate-level personnel.

Courses (2)–(6) are offered at Buenos Aires.

(7) Health Planning; the course lasts for 8 weeks and is offered at Córdoba.

The institution in Córdoba also offers a number of short, part-time courses, varying in duration from 3 to 40 weeks, on subjects such as hospital administration, health administration, basic public health, hospital statistics, epidemiology, and human ecology. These courses are taught in different provinces of the country by teachers and graduates of the school.

At the institution in Buenos Aires public health is taught to undergraduate medical students, various extension and continuing education courses in the public health field are organized, and postgraduate courses in the teaching of public health and research methods applied to medicine are offered.

The following paragraphs relate particularly to the courses leading to the Diploma in Public Health.

Conditions of admission

Applicants seeking admission to the D.P.H. course at either institution must hold a basic qualification in medicine, biology, dentistry, nursing, veterinary medicine, or any other comparable university degree. In general, preference is given to applicants sponsored by the health services, who have already had some experience in the field of public health and who will be assigned to appropriate posts on completion of the course. Preference is generally given to younger applicants (at Córdoba they should not be older than 45 years). At both institutions applications are considered by an admissions committee, and in some cases applicants are submitted to personal interview.

At both institutions instruction for the D.P.H. is free of charge. Scholarships are available from the Ministry of Health and Social Affairs and in some cases from the state health services. Foreign students are eligible for admission with the support of a national health authority or an international agency.

Curriculum

At both institutions the curricula are designed and reviewed by special committees. At Córdoba the Committee is composed of the Registrar (*Secretario Docente*) and members of the teaching staff; at Buenos Aires it is composed of the coordinators of the key teaching areas (6 in all).

At both institutions the curricula relate to the tasks the students should be able to perform after completion of the courses. At Córdoba seminars, workshops, problem-solving exercises, and field work in various settings are the main methods of instruction; self-instructional materials are also used. At Buenos Aires theoretical instruction occupies the first semester and is gradually complemented by seminars, group discussions, individual or collective exercises, etc. Students who have no previous training in public health follow an introductory course lasting 120 hours, in addition to the main course. At both institutions the curricula include obligatory and elective subjects totalling approximately 1200 hours of formal instruction. Students undertake a period of field work in the urban and rural health services at the end of the courses at both institutions. During this period of practical training they put into practice the health planning and public health administration methods they have learnt.

The management of health services based on primary health care is taught in all the courses at both institutions, at Buenos Aires particular attention being paid to it in teaching public health administration.

Assessment of students

During some of the courses at Buenos Aires students are kept informed of their progress.

At both institutions the final examinations are conducted by the teaching staff. At Buenos Aires they consist of practical and oral tests and at Córdoba they consist of written as well as practical and oral tests. Methods of assessment also include intermediate examinations, the observation of students in class and in the field, projects, and problem-solving exercises. At both institutions final essays and satisfactory records of attendance are required.

Qualification

After having attended the courses of instruction, succeeded in the examinations, and fulfilled other requirements such as field work, candidates are awarded the Diploma in Public Health. In Argentina, a postgraduate qualification in public health is required for employment in a large number of posts in the national and state public health services, in public health organizations, and in various private institutions.

Name and address	*Year public health course started*	*Academic year 1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Escuela de Salud Pública (G, S) **Facultad de Medicina** **Universidad de Buenos Aires** **Marcelo T. de Alvear 2202** **C.P. 1122** **BUENOS AIRES**	1960	3 ft 25 pt	811[a]	28
Escuela de Salud Pública (G, I, S) **Universidad Nacional de Córdoba** **Pabellón Argentina** **Ciudad Universitaria** **Estafeta 32** **5000 CÓRDOBA**	1974	1 ft 15 pt	N: 153	N: 25[b] (14 m; 11 f)

[a] Includes participants in all postgraduate public health courses, including seminars and short courses.

[b] 1983 figures.

Australia

General information

In Australia, postgraduate training in public health is available at the Department of Social and Preventive Medicine, Monash University, Victoria and at the Commonwealth Institute of Health, University of Sydney, which replaced the School of Public Health and Tropical Medicine in 1980.

The Department of Social and Preventive Medicine is part of the Medical School of Monash University. It is financed by the Commonwealth Department of Education and the Government of the State of Victoria. Its chief executive officer is the Chairman of the Department.

The work of the Commonwealth Institute of Health comprises teaching, investigation, and consultation in all fields relating to the maintenance and promotion of health, and includes the study of health problems in the tropics and in the developing nations. The academic and research functions of the Institute are under the direction of the University of Sydney, while its various training, consultative, and professional services are maintained by the Commonwealth Department of Health. To a large extent the Commonwealth Department of Health also finances the Institute's activities, the remainder being financed by grants from public and private sources. The chief executive officer is the Principal.

The academic year begins in February and ends in November. The language of instruction is English.

The University of Queensland offers a 1-year master of community nutrition course, in collaboration with institutions in Malaysia, the Philippines, and Thailand. This is an advanced training course for students with a degree in agriculture or the health or social sciences, who are employed in middle- or higher-level management posts and who have the potential to use their training on returning home.

The School of Health Administration, University of New South Wales, offers a 9-month master's course in health planning and a 21-month master's course in health administration. A master of nursing administration course was to start in 1984.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for a minimum of either 1 year full time and 6 months part time, or 2 years part time at the Commonwealth Institute of Health; and for 36–45 months part time at Monash University.

(2) Postgraduate Diploma in Tropical Public Health (D.T.P.H.); the course lasts for 1 year full time and is offered at the Commonwealth Institute of Health.

(3) Diploma of Nutrition and Dietetics; the course is offered at the Faculty of Science, University of Sydney, using the facilities of the Commonwealth Institute of Health.

Undergraduate and postgraduate students from various faculties of the University of Sydney are taught in the various departments of the Commonwealth Institute of Health. Several short courses for different categories of health personnel are also offered.

Conditions of admission

Applicants for the M.P.H. course at the Commonwealth Institute of Health should hold a basic degree. If the minimum period of study leading to the basic degree was less than 4 years they are required to pass an entrance examination. Applicants for the D.T.P.H. should hold a basic degree or have obtained educational qualifications or experience approved by the Faculty of Medicine and the Academic Board of the University of Sydney. Foreign students are admitted but, in addition to the abovementioned qualifications, must be proficient in the English language, and must satisfy the requirements of the Government of Australia for entry into the country. There is no age limit for applicants.

At Monash University applicants for the M.P.H. course must have a registrable degree in medicine. There is no entrance examination, no medical examination, and no age limit.

No tuition fees are charged at either institution, but at the Commonwealth Institute of Health all students must pay A.$110 for compulsory student activities. No training grants are provided by either institution. A visa renewal application fee of up to A.$2000, an amount determined by the Department of Immigration and Ethnic Affairs, may be charged to private foreign students.

Curriculum

At Monash University a departmental curriculum committee is assisted by officers from other departments of the University and from the Health Commission of Australia. The course is intended for medical officers responsible for the prevention and control of health hazards prevailing in the community, whose responsibilities fall into 4 broad categories: health service, training, epidemiology, and research. The course consists of compulsory and elective subjects and totals 600 hours of formal instruction.

At the Commonwealth Institute of Health a curriculum review committee, composed of the Principal and senior representatives from each of the five major departments—epidemiology and biostatistics, nutrition, occupational and environmental health, preventive and social medicine, public health biology, and tropical health—reviews the curriculum periodically and makes changes in the programme.

Students in the M.P.H. and D.T.P.H. courses follow an identical core course for 1 term; their work is assessed through a combination of written examinations, essays, projects, and classwork, and must reach a certain standard before they are allowed to progress to the rest of the programme. In addition, students without a medical or formal biological background may be required to take a course in medical terminology.

After having completed the first term's core course, M.P.H. students may specialize in occupational health, public health, or tropical health. Other options will become available in the future. Students in the D.T.P.H. course and those taking the tropical health option of the M.P.H. course follow the same programme, but M.P.H. students must also undertake a supervised research project and present a thesis. The M.P.H. course comprises approximately 700 hours of formal instruction.

Lectures, seminars, workshops, and problem-solving activities are the predominant methods of instruction at both institutions; to a lesser extent self-instructional material is used and field visits undertaken.

Neither institution has an urban or a rural health centre under its direct control, but arrangements are made with various branches of the health services, with private industrial concerns, or with community development field training areas, for the practical training of their students.

Assessment of students

At both institutions informal continuous assessment during all the courses keeps the students informed of their progress. Formal assessment takes place during and at the end of the courses. Methods of assessment include essays, projects, problem-solving exercises, and written, oral, and practical (laboratory) examinations. At the Commonwealth Institute of Health the observation of students in class and in the field is also a method of assessment. The final examinations are conducted by a special committee, which at the Commonwealth Institute of Health includes external examiners. At both institutions students in the M.P.H. course must also present a thesis.

Qualification

After having attended the necessary courses, completed the required field work and other assignments, succeeded in the final examinations, and presented a satisfactory thesis, candidates are awarded the degree of Master of Public Health. This is not a statutory requirement for employment in any post in Australia; however, middle-management positions in government health authorities are usually filled by graduates in public health.

Name and address	*Year public health course started*	*Academic year 1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Social and Preventive Medicine (G, I) Monash University Alfred Hospital PRAHRAN Victoria 3181	1982	6 ft 20 pt	. .	N: 16 (12 m; 4 f)
Commonwealth Institute of Health (G, I, S) University of Sydney SYDNEY New South Wales 2006	1930[a]	38 ft 2 pt	N: 134	N: 29[b] (17 m; 12 f) F: 7 m

[a] The year diploma courses were first offered; the M.P.H. course was introduced in 1978.

[b] Students attending formal courses; does not include enrolled students undertaking supervised research.

Bangladesh

General information

In Bangladesh, postgraduate training in public health is available at the National Institute of Preventive and Social Medicine, Dhaka. The Institute, which is headed by a director, is part of Dhaka University and is administered by the Faculty of Postgraduate Medical Sciences and Research and the Academic Council of the University. It comes under the jurisdiction of the Ministry of Health and Population Control, which provides its finances, with a certain amount of support from international organizations such as UNDP, UNFPA, and WHO.

The academic year begins in July and ends in June. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.)

(2) Master of Public Health (Health Education) (M.P.H.(H.Ed.))

(3) Diploma in Community Medicine (D.C.M.)

(4) Diploma in Industrial Health (D.I.H.)

All the courses last for 1 year. In addition, there is a 6-week orientation certificate course for 12 different categories of personnel, from front-line health worker to deputy director.

Conditions of admission

Applicants for the D.P.H. and D.C.M. courses must hold the M.B., B.S. degree. For the M.P.H.(H.Ed.) course holders of a master's degree in arts, social science, or biological science, a B.A., or a B.Sc. are also admitted. Different amounts of professional experience in hospitals and/or health centres are required, depending on the course and the applicant's qualifications. There is no age limit for admission and no test of linguistic ability. An entrance examination is held and a medical examination is obligatory.

The courses are free for state employees. For private students the tuition fee for the D.P.H., the M.P.H.(H.Ed.), the D.C.M., and the D.I.H. courses was Takas 500 during the academic year 1979–1980.

Curriculum

A curriculum committee, with the Director of the Institute as Chairman, is composed of government-approved members of the Academic Council of Dhaka University, representatives of the Ministry of Health and Population Control, and experts from different disciplines for different courses. Curricula drawn up by the Committee are reviewed by the Faculty of Postgraduate Medical Sciences and Research and the Academic Council of the University.

Ad hoc surveys and health profile exercises are undertaken in order to identify specific community health problems, which are taken into account in the curriculum design of different courses. Students spend 3–4 months in rural areas in order to experience the problems they will face after qualification.

The D.P.H. and M.P.H.(H.Ed.) courses consist of compulsory subjects; the total number of hours of formal instruction is 620 for the D.P.H. course and 573 for the M.P.H.(H.Ed.) course.

Lectures, discussions, seminars, workshops, field visits, and field practice are the predominant methods of instruction; simulation, role-playing, problem-solving activities, and self-instructional materials are used a little. The Institute has arrangements with urban and rural health centres and community development field training areas for the practical training of its students.

The management of health services based on primary health care is taught in all the courses.

Assessment of students

In some of the courses, formative assessment keeps the students informed of their progress. Methods of assessment include the observation of class participation, projects, written and oral examinations, and dissertations. The final examinations, conducted by a special committee of internal and external examiners, is composed of written, oral, and practical tests. For the D.P.H., satisfactory performance in an intermediate examination conducted by Dhaka University is also required. A satisfactory record of attendance (at least 75% of the time) is a requisite for the completion of all the courses.

Qualification

After having completed the courses and passed the requisite examinations, candidates receive the Diploma in Public Health, the Master of Public Health (Health Education), the Diploma in Community Medicine, or the Diploma in Industrial Health. In Bangladesh, a postgraduate qualification in public health is required for employment in the following posts:

a. Administration: Thana health administrator;[1] deputy civil surgeon; additional civil surgeon; civil surgeon; assistant director; deputy director; director; additional director general; director general.

b. Teaching posts in disease prevention: professor; associate professor; assistant professor.

c. Research posts: director and additional director; principal scientific officer; senior scientific officer.

d. Laboratory services: director; deputy director; assistant director; superintendent of a vaccine laboratory.

e. Health education bureau: chief health education officer; deputy chief health education officer; assistant chief health education officer; district health education officer.

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[1] Thana = an administrative division averaging 330 km^2 with an average population of 180 000.

Name and address	*Year public health course started*	*Academic year 1980–1981*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
National Institute of Preventive and Social Medicine (G, I, S) Mohakhali DHAKA 12	1978	23 ft 2 pt	N: 91	N: 11[a] 5[b] 4[c]

[a] D.P.H. course.
[b] D.C.M. course.
[c] M.P.H.(H.Ed.) course.

Belgium

General information

In Belgium, seven institutions provide postgraduate training in public health. The first one listed in the table—the Prince Leopold Institute of Tropical Medicine—is a separate interuniversity institution, administered by an administrative council and financed by the Ministry of Education. The chief executive officer is the Director. Each of the remaining six institutions is attached to a univeristy, the form of attachment varying. The universities are either State-owned, financed by the Government, or nongovernmental institutions subsidized by the State and receiving grants from public or private foundations, and, in some instances, from international organizations. Each institution is administered by an administrative council presided over by a director or a chairman and composed of elected members of the faculty, and sometimes also of representatives of the technical and scientific personnel and the student body.

The academic year begins in September or October and ends in June or July. The languages of instruction are French at the Free University of Brussels, the Catholic University of Louvain, Brussels, and the institution in Liège; French and English at the institution in Antwerp; Dutch at the Vrije Universiteit Brussel and the institution in Ghent; and Dutch and English at the institution in Leuven.

Courses offered

The following courses are organized:

(1) Public Health Physician (*Grade de Médecin Hygiéniste*), offered at all the institutions except the Prince Leopold Institute of Tropical Medicine, Antwerp. The course lasts for 1 academic year full time; at the Free University of Brussels and the Vrije Universiteit Brussel it may also be followed part time for 2 years.

(2) Master of Public Health (*Maîtrise en Santé publique*); the course lasts for 1 year and is offered at the Free University of Brussels, the Catholic University of Louvain, Brussels, and the Katholieke Universiteit Leuven, where it is intended specifically for foreign students.

(3) Public Health and Community Medicine leading to a special diploma (*Licence Spéciale*); the course lasts for 24 months and is offered at the Free University of Brussels, the Catholic University of Louvain, Brussels, and the Katholieke Universiteit Leuven. At the Catholic University of Louvain, Brussels students may specialize in (a) community health or (b) public health and hospital hygiene.

(4) Child and Adolescent Health leading to a special diploma; the course lasts for 24 months and is offered at the Catholic University of Louvain, Brussels and the Katholieke Universiteit Leuven.

(5) Occupational Health leading to a special diploma; courses lasting for 24 months are offered at the Free University of Brussels, the Catholic

University of Louvain, Brussels, Ghent, and the Katholieke Universiteit Leuven; and a course lasting for 10 months is offered at Liège. At Leuven students may specialize in (a) industrial health, (b) insurance medicine, or (c) radiation health. At the Catholic University of Louvain, Brussels students may specialize in (a) industrial toxicology, (b) ergonomy, (c) pathology, or (d) radiation protection.

At the Free University of Brussels students who have satisfactorily completed the first year of course (3) are awarded the degree of Master of Public Health. At the Catholic University of Louvain, Brussels and the Katholieke Universiteit Leuven those who have successfully completed the first year of courses (3)–(5) are awarded the *Grade de Médecin Hygiéniste*.

(6) Diploma in Public Health, offered at the Catholic University of Louvain, Brussels.

(7) Hospital Sciences leading to a special diploma (*Licence en Sciences hospitalières*): option (*a*) administration and management of hospitals and medicosocial institutions (*administration et gestion des institutions hospitalières et médicosociales*); option (*b*) administration of nursing services and nursing education (*administration des services infirmiers et enseignement*). The course lasts for 2 years at the Free University of Brussels and the Katholieke Universiteit Leuven, and for 8 months at the Catholic University of Louvain, Brussels. During the second year students may study extra subjects to enable them to take the examination for the diploma in teaching hospital sciences. A course lasting 4 years, at the end of which students are required to present a thesis, is offered at the Vrije Universiteit Brussel.

(8) Sports Medicine leading to a special diploma (*Licence en Médecine du Sport*); the course lasts for 24 months and is offered at Ghent and Liège.

(9) International Course in Health Development (*Cours international pour la Promotion de la Santé*) leading to a Master of Public Health (*Maîtrise en Santé publique*) degree. The course lasts for 9 months and is offered at the Prince Leopold Institute of Tropical Medicine, Antwerp. It is given in English one year and French the next year; in the year in which it is given in French at Antwerp, it is given at the Royal Tropical Institute, Amsterdam, Netherlands in English.[1]

(10) Doctor of Public Health (*Doctorat en Santé publique*), available at the Catholic University of Louvain, Brussels, the Free University of Brussels, and the Katholieke Universiteit Leuven.

(11) Interuniversity Course in Insurance Medicine, offered jointly by the universities in Ghent and Leuven and the Universitaire Instelling Antwerpen; the course extends over 1 academic year of part-time study. Students who study insurance medicine for a further year and present a satisfactory thesis are awarded a special diploma in occupational health (insurance medicine).

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[1] See p. 113.

(12) Interfaculty Certificate in Lay Moral Assistance (*Licence spéciale—Certificat interfacultés en Assistance morale laïque*); the course lasts for 1 year and is offered at the Vrije Universiteit Brussel and the Free University of Brussels.

(13) Statistical, Epidemiological and Operational Methods applied to Medicine and Public Health (*Méthodes statistiques, épidémiologiques et opérationnelles appliquées à la Médecine et à la Santé publique*); the course lasts for 4 months and is offered at the Free University of Brussels.

(14) Complementary Instruction in Radiation Protection (*Enseignement complémentaire en Radioprotection*); the course lasts for 1 year.

(15) Complementary Instruction in School Hygiene (*Enseignement complémentaire de Médecine scolaire*).

(16) Certificate in Hospital Management (*Certificat d'Etudes en Gestion hospitalière*); the course lasts for 1 year.

Courses (14)–(16) are offered at the Free University of Brussels and the Catholic University of Louvain, Brussels. A 2-year course leading to a special diploma in Hospital Hygiene (*Hygiène hospitalière—Licence spéciale*) is in preparation at the Free University of Brussels.

(17) Diploma in Tropical Medicine (*Diplôme de Médecine tropicale*).

(18) Diploma in Veterinary Tropical Medicine (*Diplôme de Médecine vétérinaire tropicale*).

(19) Certificate in Tropical Medicine (*Certificat de Médecine tropicale*).

Courses (17)–(19) are offered at the Prince Leopold Institute of Tropical Medicine, Antwerp, and are open to holders of professional degrees in medicine, veterinary medicine, and nursing, respectively.

(20) Health Education leading to a diploma (*Licence en Education pour la Santé*); the course lasts for 2 years.

(21) Master in Hospital Administration; the course lasts for 1 year.

Courses (20) and (21) are offered at the Catholic University of Louvain, Brussels.

Conditions of admission

There is no age limit or entrance examination for admission. Applicants for the courses leading to the degree of Public Health Physician and special diplomas in Public Health and Community Medicine, Child and Adolescent Health, and Occupational Health must possess a basic medical degree. Applicants for admission to the International Course in Health Development at the Prince Leopold Institute of Tropical Medicine, Antwerp, must, in addition, have had experience in the management and planning of health services in developing countries for at least 4 years. All applicants must undergo a medical examination. Foreign students are eligible for admission and are requested to produce evidence of their proficiency in the language of instruction at the institution they wish to attend.

Tuition fees are charged. In the academic year 1979–1980 the fee was B.Frs 10 000–130 000 for national students and up to B.Frs 213 000 for foreign students. Bursaries are not available but limited financial assistance is provided by the Government of Belgium through the Ministry of Technical Cooperation or through other bilateral agreements.

Curriculum

In the six institutions attached to a university the authority responsible for the design and revision of each curriculum is a body—curriculum or scientific committee, or academic council—composed of representatives from the departments concerned with special topics, and presided over by the dean or the coordinator. These committees meet at regular--monthly and/or yearly—intervals to determine the tasks students should be able to perform on completion of their studies. Thereafter, the instruction provided is aimed accordingly at given objectives. The opinions of the students, expressed at the end of each course, are also taken into consideration in designing the curriculum in some instances.

The curriculum leading to the Public Health Physician degree consists of core subjects, taken by all students, and special topics. The special topics are grouped under the following headings:

(*a*) public health;
(*b*) community health;
(*c*) occupational health;
(*d*) school health and physical education;
(*e*) radiation protection;
(*f*) hospital hygiene.

The number of hours of formal instruction amounts to between approximately 300 and 600, depending on the institution and the option chosen. Varying periods of field practice may also be required. Students in the first year of a course leading to a diploma with specialization in one of the areas mentioned above generally take the same core subjects as those studying the same area as a special topic for the Public Health Physician degree. Special diploma students then spend their second year on seminars and discussions and in preparing their theses.

All the institutions include in their programmes a course on the management of health services based on primary health care, given within the hospital science or hospital and medical administration course, or other similar courses. Instruction is both theoretical, through lectures, seminars, and workshops, and practical, through the utilization of self-instructional material, role-playing, simulation, field visits, and field work, etc. For the practical training of their students, the institutions have arrangements with various urban and rural health centres, or community development field training areas.

The Catholic University of Louvain, Brussels, the Vrije Universiteit Brussel, and the Katholieke Universiteit Leuven run their own health centres, which specialize in preventive medicine, youth health, medical and social services, school health, medical counselling on children's education, the mental health of children and adults, family assistance, and services for persons with speech and hearing defects.

At the Prince Leopold Institute of Tropical Medicine, Antwerp the Curriculum Committee is composed of representatives of the Governments of Belgium and the Netherlands, and representatives of the Institutes in Antwerp and Amsterdam. The main purpose of the International Course in Health Development is to train physicians to deal with all aspects of the management and planning of health services. The course is given in three parts of approximately equal duration comprising:

> *Part I:* The analysis and management of health systems;
> *Part II:* The application of methodology to selected health problems;
> *Part III:* Personal work; (i) an individual analysis of a department of the Belgian or Netherlands Health Service, and (ii) the preparation of an individual project dealing with an aspect of public health in the home country of the student. The subject of this project forms that of the thesis for the degree.

Emphasis in the course is placed on hospital medicine, in relation to which the subjects of pathology, paediatrics, bacteriology, virology, protozoology, mycology, entomology, statistics, general epidemiology, health education, and the organization of health services are covered. Clinical instruction is given at the Leopold II Clinic which is attached to the Institute of Tropical Medicine.

Assessment of students

Except at the institutions in Ghent and Liège and the Vrije Universiteit Brussel, students are kept informed of their progress during the courses by means of informal written or oral tests.

At the end of each course a final examination is held. It is conducted by internal examiners at all the institutions except the Prince Leopold Institute of Tropical Medicine, Antwerp, where the final examination is held before a board of internal and external examiners. Before admission to the final examination, the attendance record, performance in field work, and specialized professional experience of the student are considered, and whether assignments have been completed satisfactorily. The examination is oral and practical; in addition, a written test is given at most of the institutions. A thesis may also be required.

Qualification

After having completed the course, succeeded in the examination, and presented a thesis if it is required, candidates are awarded the respective degree. The Public Health Physician degree (*Grade de Médecin Hygiéniste*) is conferred by the university to which the institution is attached. The degree of Master of Public Health is conferred by the administrative councils of the Free University of Brussels, the Catholic University of

Louvain, the Katholieke Universiteit Leuven, or the Director of the Prince Leopold Institute of Tropical Medicine.

In Belgium, possession of the degree of Public Health Physician (*Grade de Médecin Hygiéniste*) is required for employment in posts connected with the public health service, such as appointments in public health administration, school health, occupational health, or radiation protection.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Institut de Médecine tropicale Prince Léopold (S) (Prins Leopold Instituut voor Tropische Geneeskunde) Nationalestraat 155 2000 ANTWERPEN	1965	12 ft 22 pt	F: 20 (16 m; 4 f)	F: 20 (16 m; 4 f)
Ecole de Santé publique[a] Université libre de Bruxelles Campus Erasme Route de Lennik 808 1070 BRUXELLES	1961	7 ft 64 pt	N: 199 (74 m; 125 f) F: 145 (99 m; 46 f)	N: 15 (10 m; 5 f) F: 37 (27 m; 10 f)
Ecole de Santé publique Université catholique de Louvain Clos Chapelle aux Champs 30 1200 BRUXELLES	1961	7 ft 36 pt	N: 70 (26 m; 44 f) F: 15 (9 m; 6 f)	N: 3 (1 m; 2 f) F: 3 (2 m; 1 f)
School voor Maatschappelijke Gezondheidszorg Vrije Universiteit Brussel Laarbeeklaan 103 1090 BRUSSEL	1974	..	..	..
Dienst voor Hygiëne en Sociale Geneeskunde Rijksuniversiteit te Gent (Service d'Hygiène et de Médecine sociale Université de l'Etat de Gand) Akademisch Ziekenhuis (Hôpital Universitaire) de Pintelaan 135 GENT	1939	25 ft 1 pt	N: 32 (27 m; 5 f)	N: 20 (16 m; 4 f)
Ecole de Santé publique de Liège Université de l'Etat à Liège Rue de Pitteurs 20 4020 LIÈGE	1908	12 ft 1 pt	N: 200 (81 m; 119 f) F: 11 (8 m; 3 f)	N: 171 (61 m; 110 f) F: 9 (6 m; 3 f)
School voor Maatschappelijke Gezondheidszorg (G, I, S) Katholieke Universiteit Leuven Vital Decosterstraat 102 3000 LEUVEN	1964	43 ft 22 pt	N: 251 (157 m; 94 f) F: 6 (4 m; 2 f)	N: 87 (50 m; 37 f) F: 4 (3 m; 1f)

[a] 1980–1981 figures.

Benin

General information

Postgraduate training in public health is available in Benin at the Regional Centre for Health Development, Cotonou. The institution was created in 1977 as the Institute of Public Health, Cotonou, but in 1980 was renamed and its courses reorganized to relate more closely to the Declaration of Alma-Ata and relevant resolutions of the governing bodies of WHO. The Centre was then able to give priority to health programme management and primary health care and to meet the most pressing needs of the Member States of the WHO Region for Africa. Courses are oriented towards the social, economic, and cultural characteristics of Africa, but applicants from countries in other WHO Regions may also be admitted.

The Centre's functions are to train personnel from the health sector and related areas to:

(1) Participate in the balanced, multidisciplinary, and multisectoral development of their countries.

(2) Carry out applied research.

(3) Develop cooperation between countries of the Region.

(4) Implement primary health care within the framework of national health care systems.

Emphasis is placed on the training of different categories of health personnel and workers from other areas, such as sociologists, economists, and agricultural experts, to work in teams in order to evaluate and solve the health problems of the community.

The Centre is a separate institution, but is administratively and academically attached to the National University of Benin. It is headed by a study coordinator and is funded by the Government and the World Health Organization.

The academic year begins in October and ends in August. The language of instruction is French.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.); the course lasts for 1 year.

(2) Master of Public Health (M.P.H.); the course last for 2 years, or 1 year for candidates who already possess a D.P.H.

In the near future it is intended to offer a doctorate in public health course.

Conditions of admission

Applicants for the D.P.H. and M.P.H. courses must have the appropriate basic degree or diploma of their discipline, as well as a minimum of 2 years' professional experience. In addition to those from the health field (such as physicians, nurses, or pharmacists) applicants from other fields may also be accepted (for example, teachers, sociologists, or administrators). Applications for admission must be directed by the applicant's government to the World Health Organization, Regional Office for Africa, P.O. Box No. 6, Brazzaville, Congo. There is no entrance examination, but applicants must undergo a compulsory pre-test on arrival at the Centre in order to determine their levels of knowledge and facilitate the planning of their programmes. There is no age limit for admission but applicants must satisfy health requirements. Fellowships may be awarded by WHO through the applicant's national health administration.

Curriculum

A curriculum committee consists of the full-time teachers at the Centre and an educational expert. General, intermediate, and specific learning objectives have been defined.

The curriculum for the D.P.H. course consists of 4 compulsory modules: (1) *general orientation*, which includes discussion of the objectives of the Centre, health development, and technical cooperation (180 hours); (2) *management*, which includes the managerial processes for health development, programme budgeting, evaluation, and information systems development (160 hours); (3) *primary health care*, which includes health education, environmental health, family health, communicable disease control, and essential drugs (350 hours); and (4) *research*, which is devoted to the methodology and application of social, health, and biomedical research (70 hours). The students in the M.P.H. course follow the programme for the D.P.H. course during the first year, and spend the second year in the more intensive study of community health, research methods in public health, and teaching methodology. During that time they write and present dissertations on their research subjects.

The predominant methods of instruction are workshops and seminars, case studies, the preparation and testing of materials, field visits, and field practice. There are a number of lectures often given by the students themselves and always followed by group discussions. The Centre has under its direct control rural health centres and community development field training areas for the practical training of its students; it also makes arrangements with other centres outside its direct control.

Assessment of students

Both the courses involve continuous formative assessment in order to aid the students to improve their performance. Methods of assessment include the observation of students in class and in the field, practical work, problem-solving exercises, written examinations, and a dissertation. The final examinations are conducted by the staff of the Centre. Students are required to present and defend their dissertations before a special committee of internal and external examiners which is appointed by the Rector of the National University of Benin.

Qualification

After having attended the necessary courses of instruction, completed the necessary practical work, succeeded in the final examinations, and presented and defended satisfactory dissertations, candidates are awarded the Diploma in Public Health or the Master of Public Health. In Benin, a postgraduate qualification in public health is required for employment in senior administrative posts at the central Ministry of Public Health level and the provincial level.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Centre régionale de Développement Sanitaire (G, I, S)[a] (Regional Centre for Health Development) B.P. 918 COTONOU	1977	5 ft 16 pt	N: 10 (6 m; 4 f) F: 30 (24 m; 6 f)	N: 10 (6 m; 4 f) F: 30 (24 m; 6 f)

[a] Applications for admission to the D.P.H. or M.P.H. course must be directed by the applicant's government to the World Health Organization, Regional Office for Africa, P.O. Box No. 6, Brazzaville, Congo.

Brazil

General information

In Brazil, postgraduate training in public health is available at 2 institutions. One of these—the Faculty of Public Health, São Paulo—is part of the State University of São Paulo. The other—the National School of Public Health, Rio de Janeiro—is one of the teaching establishments of the Fundação Oswaldo Cruz, a foundation created by the Federal Government for the specialized training of health workers, and is attached to the Ministry of Health. The institutions are mainly tax-supported—that at São Paulo principally by the local authorities and that at Rio de Janeiro by the national authorities—with some support from other sources.

In addition to the courses it offers at Rio de Janeiro, the National School of Public Health organizes and coordinates regional public health courses in 11 state capitals of Brazil through formal agreements with the state health secretariats and the local federal universities. The courses are taught mainly by regional staff with additional staff from Rio de Janeiro as required.

The academic year begins in March and ends in December. The language of instruction is Portuguese.

Courses offered

The following courses are organized:

(1) Basic Course in Public Health, offered at both institutions, and in 11 state capitals under the auspices of the National School of Public Health, Rio de Janeiro; the course lasts for 10 months at São Paulo and 8 months[1] at Rio de Janeiro and the different state capitals.

(2) Residency in Public Health and Social Medicine: an in-service training course, open to graduates with different professional backgrounds, covering the same subjects as the basic course in public health. The course lasts for 12 months and is offered at Rio de Janeiro; it is planned to hold courses at other centres as is done for the basic course in public health.

(3) Specialization in Public Health; this course may be followed by students who have successfully completed the basic course in public health or the residency in public health and social medicine and who wish to specialize in fields such as epidemiology, health planning, or public health laboratory work. It lasts not less than 4–5 months and is offered at Rio de Janeiro.

(4) Course in Public Health for Engineers; the course lasts for 9 months and is offered at both institutions.

(5) Master of Public Health (*Mestrado em Saúde Pública*); the course lasts for not less than 2 years and not more than 4 years and is offered at both institutions.

(6) Doctor of Public Health (*Doutorado em Saúde Pública*); the course lasts for not less than 3 years and not more than 5 years and is offered at both institutions.

(7) Course in Hospital Administration.

(8) Course in Health Education.

Courses (7) and (8) are offered at São Paulo and last for 10 months. Both institutions also offer shorter courses and university extension courses, some at the local level, on subjects such as epidemiology, entomology, the health aspects of respiratory diseases, or the laboratory analysis of water.

Conditions of admission

Applicants for the basic course in public health at both institutions must be university graduates. They must pass an entrance examination and undergo a medical examination. Applicants for the Master of Public Health course must have obtained a basic postgraduate qualification in the relevant field and may be asked to provide evidence of language proficiency.

Tuition is free at Rio de Janeiro, and training grants are available from the institution. At the institution in São Paulo a nominal tuition fee is charged; in 1979 it was Cruz. 800 on inscription and Cruz. 200 for each discipline. Holders of fellowships from certain national and international organizations are exempt from paying tuition fees.

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[1] 6 months until 1983.

Curriculum

A committee at each institution designs and revises the curriculum. At Rio de Janeiro this is called the Teaching, Research, and Extension Council; at São Paulo it is called the Academic Commission. At both institutions the curricula are oriented towards tasks the students will be expected to perform after graduation.

At both institutions the courses are multi-professional; students are accepted from a variety of educational backgrounds; they may, for example, be physicians, pharmacists, veterinarians, nurses, dentists, architects, or engineers.

At Rio de Janeiro, after taking the basic course in public health, which is composed of compulsory subjects with a total of 856 hours of formal instruction, students may follow a specialization in public health course in epidemiology, health planning, or another subject. The main methods of instruction are seminars, workshops, problem-solving exercises, field visits, and field practice, using the local public health services and an urban health centre under the control of the institution. Students also attend lectures and undertake practical work.

The basic course in public health at São Paulo consists of core subjects which are followed by all students, and other obligatory and elective subjects, depending on the particular programme and the educational background of the student. The course followed by physicians involves a minimum of 840 hours of formal instruction. Lectures, seminars, workshops, practical work, and field visits are the main methods of instruction, and students also take part in problem-solving exercises and group discussions. The institution has urban and rural health centres and a community health field training area under its direct control, and makes additional arrangements with the public health services.

The management of health services based on primary health care is taught as part of health administration in the basic course in public health at São Paulo, and during the basic course in public health at Rio de Janeiro.

Assessment of students

During all the courses at Rio de Janeiro and some at São Paulo the students are kept informed of their progress.

At Rio de Janeiro assessment is the task of the teaching staff and consists of practical tests and observation of the students' work during the year.

At São Paulo the examinations are conducted by a special committee composed of internal and external examiners. They consist of written, oral, and practical tests, including problem-solving exercises. The students' performance is evaluated in class and in the field.

At both institutions students must have a satisfactory record of attendance. A thesis is not required by either institution for the basic course in public health but is obligatory to obtain the degrees of Master of Public Health and Doctor of Public Health.

Qualification

After having satisfactorily completed the necessary courses of instruction, and the practical and field work, and passed the appropriate examinations, candidates are awarded a Diploma in Public Health. A postgraduate qualification in public health is required for employment in certain technical professional posts in the public health services.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
RIO DE JANEIRO				
Escola Nacional de Saúde Pública (G, I, S)[a] Rua Leopoldo Bulhões 1480 Manguinhos RIO DE JANEIRO	1959	63 ft 3 pt	204[b]	35[b]
SÃO PAULO				
Faculdade de Saúde Pública (G, S) Universidade de São Paulo Avenida Dr Arnaldo 715 SÃO PAULO 01255	1925	52 ft 55 pt	N: 483 (214 m; 269 f) F: 6 (4 m; 2 f)	N: 297 (114 m; 183 f) F: 3 (2 m; 1 f)

[a] 1982 figures.

[b] In 1982 a further 329 students attended the regional public health courses organized by the National School of Public Health, Rio de Janeiro.

Bulgaria

General information

In Bulgaria, higher medical education comprises a single national system. Until 1972 the postgraduate training of medical personnel (doctors, dentists, and pharmacists) was undertaken by the Postgraduate Medical Institute, Sofia. In 1972 the Medical Academy was founded which unites the higher medical institutions, located in Sofia, Plovdiv, Varna, Pleven, and Stara Zagora, and 23 scientific research institutions. It also provides postgraduate training for auxiliary health personnel.

The Medical Academy is under the authority of the Ministry of Public Health which finances it. Guidance on the techniques of higher medical education is given by the Ministry of Education, while the State Committee for Science and Technical Progress and the Bulgarian Academy of Science collaborate with the Medical Academy in the development of the medical sciences.

The Medical Academy is governed by the General Assembly, which elects a presidium which, in turn, elects a president, deputies to the president, and a chief scientific secretary. The activity of the Medical Academy as a whole is directed by the president, the deputies to the president, and the elected presidium.

Each higher medical institution is directed by a rector, and its component faculties by a dean assisted by academic and faculty councils. Each scientific institution is headed by a director assisted by scientific and educational councils.

The Medical Academy is a major scientific, educational, and practical medical establishment which coordinates the material, technical, scientific, and human resources of the faculties and research institutes. All members of its scientific and teaching staff participate in the postgraduate training of medical personnel.

The academic year begins in September and ends in July. The language of instruction is Bulgarian, but it is possible to arrange short-term courses in other languages.

Courses offered

Graduate physicians and surgeons who choose to continue their studies may specialize in any of 54 different subjects, including several in the public health field, such as epidemiology, communal hygiene, community medicine and organization of health care, child and adolescent health, and public health organization, and related specialities, such as radiation health, occupational health, food hygiene, and communicable diseases.

The training period for basic specialization lasts from 3 to 5 years, depending on the speciality, though most courses last for 3 years. Each course consists of on-the-job training with basic academic instruction at the Medical Academy, and further instruction lasting up to 3 months in selected areas of a speciality. After completing the basic training, further training in sub-specialities may be undertaken, lasting from 1 ½ to 2 years.

Various short courses are also offered. In addition, the Medical Academy provides individual tuition on particular techniques or problems.

Conditions of admission

Applicants must hold a basic medical degree and have had some practical experience. Applications for admission are submitted by district health organizations and establishments throughout the country. Students are then selected by the relevant departments and the Department of Postgraduate Training under the Presidium of the Medical Academy. They are usually already in a post of considerable responsibility; for example head physician of a health establishment, or specialist at the Directorates for Public Health and Social Welfare. There is no medical or entrance examination, no test of linguistic ability, and no age limit for admission.

Instruction is free; national students continue to receive their usual salary; those from areas outside the place of study receive a subsistence grant in addition. Foreign students are eligible for enrolment and may apply for scholarships.

Curriculum

The curricula are designed and continually revised by the respective departments, discussed by the scientific educational committees for postgraduate training, and approved by the Minister of Public Health. They take into account developments in the medical sciences and the need for practical health care.

Each student is assigned to a supervisor/counsellor who determines his training plan on the basis of the agreed curriculum for the subject he is to study. After having been selected for a course, the student is given preliminary training and sent educational materials for preparatory study. Each student is provided with a "specialist candidate's book" in which all stages of his training are noted.

The basic principle is to achieve the maximum educational effect with the minimum period of absence from the student's normal place of work. Instruction is in the form of lectures, discussions, laboratory work, and practical work (which may occupy up to 70% of the training time). The course for specialization in community medicine and organization of health care consists of compulsory subjects and involves 450 hours of formal instruction. New didactic methods are being introduced; since 1977, television has been used to transmit weekly half-hour lectures to area, rural, school, and factory doctors to assist them in their studies.

The management of health services based on primary health care is taught as part of the organization of health care services.

Assessment of students

Some of the courses involve assessment which keeps the students informed of their progress. The examination for the State Diploma of Specialist is conducted by a special examinations committee. It consists of written, oral, and practical tests, which include problem-solving exercises. Methods of assessment also include the observation of the way in which each student participates in class and in the field. Students must present dissertations.

Qualification

After having completed a course, the candidate obtains a certificate giving him the right to apply for permission to sit the examination for the State Diploma of Specialist. This qualification is required for employment in posts in the health care services, such as medical officer of health, director of a hospital, polyclinic, dispensary, or sanatorium, director of industrial health services, or head of department.

Name and address	*Year public health course started*	*Academic year 1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*[a]
Medical Academy (G, I, S) Ulica D. Nesterov 15 SOFIA 1431	1972[b]	10 ft[a] 16 pt	N: 4000 (1480 m; 2520 f) F: 50	100

[a] Course on community medicine and organization of health care only.
[b] Until 1972 postgraduate training in public health was provided by the Postgraduate Medical Institute, Sofia.

Burma

General information

In Burma, postgraduate training in public health is available at the Postgraduate School of Public Health, Rangoon (until 1981 the School of Preventive and Tropical Medicine). The institution is under the jurisdiction of the Department of Medical Education, Ministry of Health, which provides its financial support. It is part of the Institute of Medicine I, Rangoon, which awards the diploma. Its chief executive officer is the Principal.

The Director General of Medical Education, Ministry of Health, exercises administrative authority over the institution, while academic matters are dealt with by a separate body known as the Board of Studies, which has the principal of the school as chairman and the professors and lecturers as members. The Board of Studies, subject to confirmation by the Board of Postgraduate Studies, is responsible for all teaching aspects of the course, its curriculum, syllabus, and examinations, and also for the appointment of consultants to supervise students in the work connected with the preparation of their theses and examiners.

Training and research activities are developed in cooperation with other institutions, through the Departments of Medical Education and Health Services.

The academic year begins in November and ends in August. The languages of instruction are English and Burmese.

Courses offered

In 1981 the course formerly leading to the Diploma in Preventive and Tropical Medicine was reorganized. A course that leads to a Master of Medical Science in Public Health (M.Med.Sc.) is now offered; it lasts for 1 academic year, which includes the time spent on field training, examinations, and the preparation of a thesis.

Conditions of admission

Applicants for admission to the M.Med.Sc. course must hold a basic medical degree, or its equivalent. They must not ordinarily be older than 40 years, and must have spent a minimum of 2 years' approved service in a health department (including internship).

Students are selected on the basis of a written and oral entrance examination by a selection committee appointed by the Government, with the Director General of Medical Education as chairman. There is no language proficiency examination and no health requirement. No foreign students have so far been admitted, although they are eligible if they are sponsored by their governments.

The tuition fee amounts to a nominal Kyats 15 a month. The institution does not provide any training grants.

Curriculum

The course consists of compulsory subjects and involves 869 hours of formal instruction. Field visits are the predominant method of instruction; seminars, workshops, and field practice are used to a lesser extent, while lectures are used a little. The school has no field training areas under its direct control but makes arrangements with urban and rural health centres and community development field training areas for the practical training of its students.

The management of health services based on primary health care is taught as part of public health administration.

Assessment of students

Assessment during the course keeps the students informed of their progress.

The examination is administered by a board of internal and external examiners composed of 4 members for each subject. It consists of a written paper on each subject, followed by oral and practical tests, and is in 2 parts. The first part of the examination takes place at the end of March or in April, and covers microbiology, medical zoology, environmental health, and health statistics, which are taught only during Part I of the curriculum. The second, or final, part of the examination is held at the end of the academic year, usually at the end of August or in September, and includes public health administration and epidemiology. If the student fails in one of the subjects he may take it again 6 weeks after the first attempt. The first part of the examination must be passed before admission to the final part of the examination.

After the final part of the examination, each student is requested to prepare a thesis, the topic of which must have been approved at the beginning of the academic year by the Board of Studies which appoints a consultant for each student to guide, supervise, and assist him in carrying out the necessary research work. The thesis is evaluated and graded by two examiners also appointed by the Board of Studies. The grade awarded for the thesis is taken into consideration in the final grading. A student whose thesis is not considered satisfactory is allowed 4 months in which to rewrite it.

The performance of students observed in class and in the field is also taken into account and a satisfactory record of attendance is required.

Qualification

After having completed the course, succeeded in the final part of the examination, and presented a satisfactory thesis candidates are awarded the degree of Master of Medical Science in Public Health.

The possession of this degree is not at present a requirement for employment in any post in Burma, but candidates who hold it are given preference for posts in public health administration, research, and training.

Name and address	*Year public health course started*	*Academic year 1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*
Postgraduate School of Public Health (G. I. S) 56 U Wisara Road RANGOON	1966	6 ft 40 pt	N: 12 (9 m; 3 f)	N: 12 (9 m; 3 f)

Canada

General information

In Canada, postgraduate training in public health is available at the Department of Social and Preventive Medicine, Laval University, Quebec, the Department of Social and Preventive Medicine, University of Montreal, and the Division of Community Health, Faculty of Medicine, University of

Toronto[1]. The institutions are financed mainly from public funds—national, provincial, or local. All three are part of the faculties of medicine of their respective universities, under the jurisdiction of the Ministry of Education. That at Laval University is administered by a faculty council and is headed by a dean; the institution at Montreal is also headed by a dean. The graduate educational activities of the Division of Community Health, University of Toronto come under the jurisdiction of the School of Graduate Studies. The chief executive officer is the Associate Dean, Community Health of the Faculty of Medicine.

At the University of Toronto the academic year begins in September and ends in April, June, or August, depending on the course followed; the language of instruction is English. At the Universities of Laval and Montreal the academic year begins in September and ends in May; the language of instruction is French.

Courses offered

The following courses are organized:

(1) Master of Science (Community Health) (M.Sc.) (*Maîtrise en Santé communautaire*); the course lasts for 2 years and is offered at the University of Montreal.

(2) Specialist in Community Health (*Specialiste en Santé communautaire*); the course lasts for 4 years. During the third year of residence the student may take courses leading to a master's degree (see the section on curriculum for details).

(3) Master of Science (Epidemiology) (M.Sc.) (*Maîtrise ès Sciences (Epidémiologie)*); the course lasts for 2 years full time or 4 years part time.

(4) Certificate of Advanced Studies in Occupational Health; the course lasts for 1 year full time or 4 years part time.

Courses (2)–(4) are offered at Laval University.

(5) Certificate in Public Health (C.P.H.); the course lasts for 9 months full time; it may also be followed part time.

(6) Master of Health Science (M.H.Sc.); the course lasts for 16–22 months, depending on the option chosen, 1 year of which is spent in full-time attendance at the institution.

(7) Diploma in Industrial Health (D.I.H.); the course lasts for 9 months full time; it may also be followed part time.

(8) Diploma in Dental Public Health (D.D.P.H.); the course lasts for 1 year.

(9) Master of Science (M.Sc.); the course requires 1 year's full-time attendance.

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[1] The School of Hygiene, which formerly provided postgraduate instruction in public health, was disbanded in 1975 and its various departments incorporated within the Faculty of Medicine.

(10) Doctor of Philosophy (Ph.D.); the course requires 2 years' full-time attendance.

Courses (5)–(10) are offered at the University of Toronto. Courses (9) and (10) lead to research degrees and necessitate the preparation of a thesis on the basis of original research in one of the following: the behavioural sciences; biostatistics; epidemiology; the exercise sciences; or health administration.

(11) At the University of Toronto there is a joint M.D./M.H.Sc. programme which accommodates up to 4 students of the Faculty of Medicine. Students must apply during the first year of the undergraduate medical course and meet graduate school requirements. They must choose community health subjects for their elective courses and undertake summer fellowships during the second and third years, and spend 1 year as a full-time M.H.Sc. student either before or after the fourth year.

Physicians can also be admitted for residency training at the University of Toronto, leading to a fellowship in community medicine of the Royal College of Physicians and Surgeons of Canada.

Conditions of admission

Applicants for the Master of Science courses at Laval University and Montreal must possess a bachelor's degree in the health sciences, or have completed the first phase of university studies in the health sciences. Applicants for the specialist in community health residency at Laval University must hold a basic medical degree and their references, study records, previous experience, and career plans are evaluated by an admissions committee. Applicants for the courses leading to the M.H.Sc., M.Sc., C.P.H., and D.I.H. at Toronto must hold a bachelor's degree from that University, or an equivalent degree from a university recognized by the Governing Council. Applicants who wish to specialize in health administration for the M.H.Sc. must have had some work experience in a field related to health. There is no age limit for applicants, no entrance examination, and no medical examination, but students whose mother tongue is not the language of instruction must pass a language proficiency test.

Tuition fees are charged. For the academic year 1981–1982 they varied from Can.$555 to 1064 for national students and Can.$2349 to 8700 for foreign students (in the absence of a special agreement between the Government of Canada and the government of the country from which the student comes).

Curriculum

At each of the 3 institutions a curriculum committee is composed of senior members of the academic staff, including the teaching staff of the programme, and elected students. At Laval University and Montreal the curricula are structured with the tasks the students will perform after graduation in mind.

The Specialist in Community Health programme at Laval University lasts for 4 years. The first year is spent in clinical training in family medicine, internal medicine, or paediatrics. The second year consists of obligatory and elective subjects, involving 765 hours of formal instruction, followed by 1 term of field practice. During the third year, the student has 3 options: (i) to obtain an M.Sc. (Epidemiology) at Laval University; (ii) to transfer to the Faculty of Administrative Sciences in order to obtain a master in business administration degree; or (iii) to transfer to the M.P.H. course at one of the universities that has agreed to credit courses followed at Laval University. The fourth year consists of supervised practical work which may include a period in an isolated rural area or a developing country.

At Montreal students in the M.Sc. (Community Health) course spend the first year studying obligatory and elective subjects with a total of 465 hours of formal instruction. During that time they make a number of field visits to enable them to choose in which branch of the public health service they wish to spend the second year. In the second year students are required to participate in a research project, analyse or design a community health programme, acquire a knowledge of the social services, and accomplish an administrative task. The second year may be spent outside Canada in an environment similar to that in which the student intends to work after graduation.

The course for the degree of M.H.Sc. at Toronto permits specialization in community health and epidemiology, community nutrition, health administration, health promotion, or occupational and environmental health (with sub-specializations such as that of occupational hygienist, occupational physician/nurse, or environmental health scientist). All students take core subjects; further obligatory subjects are determined by the area of specialization; and, in addition, students take a number of elective subjects. The exact composition of each programme, which varies in length depending on the area of specialization, must be approved by the Graduate Department of the Division of Community Health. The number of hours of formal instruction varies between 450 and 540. Every programme includes an obligatory period of 8 weeks' supervised field work; some may also involve a 6 month, supervised, residency in a community health institution, agency, or service.

The management of health services based on primary health care is taught at all 3 institutions.

Assessment of students

During some of the courses at all 3 institutions the students are kept informed of their progress.

The final examinations are conducted by members of the teaching staff, and, at Laval University, also by external examiners. Methods of assessment include the observation of students in the field, projects, and problem-solving exercises. Satisfactory performance in intermediate examinations is also required. A thesis is required for the M.Sc. (Epidemiology) degree at Laval University.

Qualification

After having completed the required assignments, projects, and field work, and succeeded in the examinations, candidates are awarded the degree of *Maîtrise en Santé communautaire, Spécialiste en Santé communautaire, Maîtrise ès Sciences (Epidémiologie)* or Master of Health Science. In Canada, a postgraduate qualification in public health is necessary for employment in the post of medical officer of health, for senior academic appointments in the public health field, and for certain senior appointments in federal and provincial ministries of health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Département de Médecine sociale et préventive Faculté de Médecine Université de Montréal 2375 chemin Côte Ste-Catherine MONTRÉAL Québec H3T 1A8	1947[a]	8 ft	N: 12 (3 m; 9 f) F: 2 (1 m; 1 f)	. .
Département de Médecine sociale et préventive (G, I)[b] Faculté de Médecine Université Laval STE FOY Québec G1K 7P4	1971	9 ft 14 pt	N: 25 (10 m; 15 f) F: 4 (3 m; 1 f)	N: 6 (4 m; 2 f) F: 1 f
Division of Community Health[c] Faculty of Medicine University of Toronto TORONTO Ontario M5S 1A8	1912	40 ft 24 pt	N: 184 (75 m; 109 f) F: 10 (6 m; 4 f)	N: 169[d] (70 m; 99 f) F: 9 (5 m; 4 f)

[a] Date instruction commenced at the School of Public Health, University of Montreal, which was dissolved in 1970; since 1976 courses in public health have been offered at the Department of Social and Preventive Medicine.

[b] 1980–1981 figures.

[c] 1981–1982 figures.

[d] Master of Health Science course.

Chile

General information

In Chile, postgraduate training in public health is available at the School of Public Health, University of Chile, Santiago. The institution is attached administratively and academically to the Faculty of Medicine which comprises 3 schools—public health, medicine, and other postgraduate studies. The University is autonomous but is financed mainly by the Government, with some assistance from public and private funds and student fees. The chief executive officer of the School of Public Health is the Director who is a professor of the Faculty of Medicine.

The institution offers assistance to the national health service and other health agencies in solving various problems related to public health. In addition to courses leading to postgraduate academic degrees in public health, a number of short intensive courses are designed to fulfil urgent needs for the training of health staff at different levels and in different specialities. Emphasis is laid on knowledge of the socioeconomic system, its implications for health, and the role of health workers as agents for change.

Various activities are undertaken in order to achieve a close relationship between the functions of the University and the needs of the population, particularly the social classes that have suffered the greatest socioeconomic deprivation. Such activities include participation in field programmes, studies and technical assistance in several health fields, and active discussion by staff and students of the national and regional problems of underdevelopment.

The academic year begins in March and ends in December. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) *Magister en Salud Pública* (Master of Public Health).

(2) *Licenciado en Medicina Ocupacional* (Licenciate of Occupational Medicine).

(3) *Licenciado en Educación para la Salud* (Licenciate of Health Education).

The courses leading to a *Licenciado*, which is equivalent to a master's degree, are conducted annually and last for 9½ months. The *Magister en Salud Pública* course lasts for 18 months and students usually spend additional time in the preparation of a thesis.

In addition to the courses listed above, there are certificate courses, full time or part time, lasting from 2 weeks to 9 months, in health statistics, maternal and child health, mental health, sanitation, and administration of health services. All these courses are designed to correspond to the needs of students from Chile itself and from other Latin American countries.

Conditions of admission

Applicants for all the postgraduate degree courses must hold a university degree in one of the health professions. They must pass an entrance examination, a vocational test, and a test of proficiency in a foreign language (usually English). They are expected to have completed at least 3 years' field experience or practice and to be recommended by the institution that employs them. The entrants are selected by the Admissions Committee, which evaluates each applicant's interest in public health. Applicants must be in good health and should not be over 45 years of age. Foreign students are eligible for enrolment and are usually sponsored by international agencies or their own governments or institutions.

Tuition fees are charged for all the courses. In 1980 the fee for national students for the Master of Public Health course was US$ 1500 and for foreign students US$ 2000. For other courses the fee was US$ 150 a month for national students and US$ 200 a month for foreign students.

Curriculum

The curriculum for the Master of Public Health course is reviewed by a teaching committee composed of full professors and heads of department. Graduates who have returned to their places of work and sponsoring institutions provide information on the relevance of the curriculum.

Students may choose to concentrate on one of the following subjects: health administration, epidemiology, maternal and child health, environmental health. They study a number of core subjects, together with other obligatory subjects depending on their areas of specialization. In addition, they choose 3 elective subjects from among the following: advanced quantitative methods, health planning, advanced health administration, sanitation, hospital administration, communicable diseases, adult health, mental health, maternal and child health, occupational health, nursing administration, health education, university teaching, demography, nutrition, public health dentistry, and public health in veterinary medicine. The number of hours of formal instruction amounts to 1134.

The main methods of instruction are workshops, seminars, problem-solving exercises, and field work. Self-instructional material is also used. Lectures and practical work are used to a lesser extent, and simulation and role-playing occasionally.

Roughly one-third of the time is allotted to practical training, carried out in various departments of the national health service, such as hospitals, clinics, or urban and rural health centres.

The management of health services based on primary health care is taught as part of health planning, health administration, nursing administration, health education, nutrition, and maternal and child health.

Assessment of students

Each student's progress is evaluated periodically; at the end of each phase of the course and at its conclusion. Examinations, which are conducted by the course instructors, consist of written and practical tests. Methods of assessment include the observation of students in class and in the field. A satisfactory record of attendance and success in intermediate examinations are also required. Students in the degree courses must present a thesis.

Qualification

Candidates who have completed the course, carried out the field work, passed the requisite examinations, and presented an acceptable thesis are awarded the degree of Master of Public Health.

In Chile, possession of this degree is not a legal requirement for public or academic appointments. However, candidates who hold it are given preference for posts in the national health service and public health teaching posts in the universities.

Name and address	*Year public health course started*	*Academic year 1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Escuela de Salud Pública (G) Avenida Independencia 939 Casilla 6537, Correo 7 SANTIAGO	1944	49 ft 19 pt	N: 341 (130 m; 211 f) F: 43 (16 m; 27 f)	N: 26 (9 m; 17 f) F: 10 (5 m; 5 f)

China

General information

In China, basic training in public health is available at 14 schools of public health. The same institutions also offer 5- or 6-year combined undergraduate courses in general medicine and public health, as do a further 9 medical colleges which do not offer postgraduate public health training.

The institutions are parts of independent medical colleges which are State-financed and operate either under the jurisdiction of their respective provincial or municipal governments, or under the joint jurisdiction of the Ministries of Education and Public Health.

Each institution is headed by a director or a dean, with professorial rank, who is responsible to the president of the college. The dean is assisted by several deputy directors, who are in charge of teaching, research, and student and administrative affairs. The dean regularly solicits opinions from the members of the institution's administrative and academic councils.

While teaching and research are the responsibilities of individual academic departments, the institution can usually draw on the professional resources of other college units as well as the services of experts from outside the college.

Each institution maintains field training facilities by entering into contract with local urban and rural health and epidemiological stations. This also provides the professional staff with the opportunity to render service to the community, cooperating with the staff of field stations in carrying out research programmes, assisting in the in-service training of professional staff at all levels, and offering technical consultations whenever and wherever the situation calls for them.

Institutes carrying out research in special subjects, such as preventive medicine, environmental health, child health, or industrial health, are attached to a few of the institutions.

The institutions at Wuhan, Harbin, and Shanghai have been designated national training centres for the in-service training of senior public health personnel.

The academic year begins in September and ends in July. It is divided into 2 semesters, separated by a 3-week winter vacation.

The language of instruction is Chinese.

Courses offered

The following courses are organized:

(1) Master of Public Health; the course lasts for 3 years and is offered at all the institutions. However, students who have taken courses at Anhui, Hunan, Nanjing Railway, and Shandong Medical Colleges must take a supplementary examination at one of the other 10 colleges in order to be awarded the degree.

(2) Doctor of Public Health. Holders of the Master of Public Health degree may be admitted to the Beijing Medical College, Shanghai First Medical College, Wuhan Medical College, or Harbin Medical University to spend 2–3 years working on a research project for the degree of Doctor.

(3) Diploma in Health Management; the course lasts for 3 years and is offered at Wuhan, Shanghai, and Harbin. Only salaried health administrators are admitted.

(4) Continuing education courses in public health subjects are offered, for varying periods of 3, 6, and 9 months, by all the institutions. Applicants, who should be public health physicians working in the field, must be recommended by the provincial and municipal health bureaux. Those who have satisfactorily completed a course and passed the examinations are awarded a certificate.

Conditions of admission

Applicants for admission to the Master of Public Health course must be graduates of colleges or universities, or possess equivalent academic standing. Applicants' credentials, which include their academic records or evidence of academic achievement, personality assessments, and health records, are reviewed by the admission office of the medical college. Approved applicants are required to take written examinations, the subjects of which usually include the principles of Marxism-Leninism, a foreign language, and basic and specialized medical and public health subjects. Applicants for the Master of Public Health course must be under 35 years of age.

No institution charges tuition fees to national students. Some subsistence grants are provided to those in need.

Curriculum

Since the academic year 1982–1983 the curriculum for the Master of Public Health course has been flexible to suit individual students. Besides the principles of Marxism-Leninism and a foreign language, at least 3 subjects, determined by each individual college, are compulsory. In addition, students may choose elective subjects relating to their particular interests. All the medical colleges have extensive lists of subjects suitable for postgraduate students. At all the institutions courses are available in biostatistics, epidemiology, environmental health, industrial health, nutrition and food hygiene, child and adolescent health, social medicine, microbiology, and sanitary chemistry. Among the subjects of recently developed courses are the principles and methods of epidemiology, computer data processing, industrial and behavioural toxicology, environmental monitoring, cancer epidemiology, child growth and development, population dynamics, and family planning.

Under the guidance of an adviser, the student plans a programme of studies. Subjects may be selected from among those offered by the various departments of the institution, as well as by the faculty of basic medical sciences of the medical college.

During the first year the compulsory subjects are studied through lectures, seminars, and laboratory work. The remaining 2 years are spent on a research project and the preparation of a thesis. Students are expected to carry out a field investigation in the course of their research, and to participate in the teaching of undergraduates.

Assessment of students

Performance is assessed by means of a written examination at the end of each course of instruction. The student is required to present a thesis and defend it before a special board consisting of 4–6 internal and external examiners.

Qualification

After having completed the course, succeeded in the examinations, and presented a satisfactory thesis, and having received the approval of the committee of assessment of academic degrees of the institution and the medical college, candidates are awarded the degree of Master of Public Health and assigned to professional posts by the State.

Name and address	Year public health course started	Academic year 1982–1983		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)[a]
ANHUI				
School of Public Health Anhui Medical College HEFEI	1974	60 ft 1 pt	77 (40 m; 37 f)	4 m
BEIJING				
School of Public Health Beijing Medical College BEIJING	1950	130 ft	107 (63 m; 44 f)	20 (16 m; 4 f)
GUANGDONG				
School of Public Health Zhongshan Medical College GUANGZHOU	1954	51 ft	43 (29 m; 14 f)	13 (9 m; 4 f)
HEILONGJIANG				
School of Public Health Harbin Medical University HARBIN	1949	106 ft 15 pt	57 (38 m; 19 f)	7
HUBEI				
School of Public Health Wuhan Medical College WUHAN	1953	123 ft	214	14 (7 m; 7 f)
HUNAN				
School of Public Health Hunan Medical College CHANGSHA	1954	74 ft	34	4
JIANGSU				
School of Public Health Nanjing Medical College NANJING	1974	50 ft 1 pt	63	6
School of Public Health Nanjing Railway Medical College NANJING	1979	. .	. .	. .
LIAONING				
School of Public Health China Medical University SHENYANG	1948	. .	. .	. .
SHANDONG				
School of Public Health Shandong Medical College JINAN	1979	78 ft	154 (117 m; 37 f)	0
SHANGHAI				
School of Public Health Shanghai First Medical College SHANGHAI	1929[b]	126 ft 35 pt	194 (110 m; 84 f)	17 (9 m; 8 f)

Name and address	*Year public health course started*	*Academic year 1982-1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*[a]
SHANXI				
School of Public Health Shanxi Medical College TAIYUAN	1953	30 ft	..	4
SICHUAN				
School of Public Health Sichuan Medical College CHENGDU	1952	119 ft	..	11 (8 m; 3 f)
TIANJIN				
School of Public Health Tianjin Medical College TIANJIN	1975	99 ft 10 pt	60 (47 m; 13 f)	8 (4 m; 4 f)

[a] Number of students in postgraduate degree courses.

[b] Public health courses first started in 1929; the School of Public Health was established in 1952.

Colombia

General information

In Colombia, postgraduate training in public health is available at the National Faculty of Public Health, Medellín. The institution is part of the University of Antioquia and is administered by the Faculty Board, which is composed of the Dean of the Faculty, the heads of its 3 departments, and one representative each of the teaching staff of the Faculty, the students, and the alumni. The institution operates under the jurisdiction of the Ministry of Health which provides the major part of its income aided by the local authorities.

The functions of the institution are research, teaching (postgraduate and continuing education), the evaluation of teaching and research in public health, health education of the community, and direct services to the community in relation to its needs and the institution's teaching and research programme. Priority is given to evaluating the national health system and public and private institutions involved in public health and social welfare. The institution is involved in activities throughout the country, particularly in areas specified in its development plan.

The academic year begins in February and ends in December. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (*Magister en Salud Publica*); the course lasts for 11 months.

(2) Postgraduate courses in specific areas of public health: (i) epidemiology; (ii) health services administration; (iii) health planning; (iv) occupational health; and (v) the planning, design, and construction of health facilities. The courses last for 24 months and lead to the degree of *Especialista*.

(3) Courses for technicians in: (i) health services administration; (ii) health statistics; and (iii) environmental health. The courses, which used to last 11 months and lead to a certificate, were upgraded in 1981 to become professional degree courses lasting 36 months.

Various continuing education courses are offered for different categories of health personnel, lasting from 1 week to 6 months, in such subjects as orientation in public health for pharmacists and veterinarians; occupational health for technicians and supervisors; food hygiene; the control of arthropods and rodents; sewage disposal; water quality control; the administration of maternal and child health programmes; and nutrition.

Conditions of admission

Applicants for admission to the Master of Public Health course must hold a university degree in a health or health-related field recognized by the Government through the Ministry of Education and the Ministry of Public Health. Applicants are chosen by a selection committee on the basis of an entrance examination; they should have had 1 year's practical experience, preferably in a public health area. There is no age limit for admission, no language proficiency examination, and no health examination. Applicants for the courses for technicians must hold a high school diploma and take entrance examinations. Foreign students are eligible for admission.

Tuition fees are charged. In the academic year 1979–1980 the fee for national students was Pesos 12000–25000 for the M.P.H. course and Pesos 5000–10000 for the other courses. The fee for foreign students was US$2000 for the Master of Public Health course and US$500–800 for the other courses. No scholarships are provided by the institution. However, the Ministry of Public Health may award training grants to students employed in national health and educational institutions who are not resident in Medellín. Recipients of grants must sign contracts with the institutions sponsoring them.

Curriculum

The curriculum is designed by programme committees and submitted to the Faculty Board for revision and approval. The teaching staff study public health problems and participate in the meetings held in various branches of the national health system, in order to analyse health needs, functions, and activities, and the role of health personnel. This cooperation ensures that the curriculum relates to the tasks the students will be required to perform on graduation.

A number of subjects are compulsory and students must also choose an elective subject from among the following: epidemiology, medical care and hospital administration, or occupational health. The number of hours of formal instruction amount to 1200.

The main methods of instruction consist of lectures, seminars, workshops, problem-solving activities, field visits, and field research. Simulation, role-playing, and self-instructional material are used to a lesser extent. Arrangements are made with urban and rural health centres and community development field training areas in various parts of the country, selected in collaboration with the public health services.

The management of health services based on primary health care is taught in the Master of Public Health course, in the specialization courses, and in the courses for technicians in health services administration, environmental health, and health statistics.

Assessment of students

Methods of assessment consist of written, oral, and practical tests, as well as projects, and the observation of students in class and in the field. The final examinations are conducted by members of the teaching staff. Students must also present a thesis. A satisfactory attendance record and success in the intermediate examinations are also required.

Qualification

After having completed the necessary assignments and field work, succeeded in the required examinations, and presented a satisfactory thesis, candidates are awarded the degree of Master of Public Health. A postgraduate qualification in public health is required for employment in technical posts at national, sub-national, and local levels of the national health system, such as chief of division, regional director, technical coordinator, chief of section, or chief of group. Private agencies in the public health field give preference to candidates with appropriate postgraduate training.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Facultad Nacional de Salud Pública (G, I, S) Calle 62, No. 52-19 Apartado Aéreo 51922 MEDELLÍN	1964	83 ft 3 ft	N: 250 (158 m; 92 f) F: 41 (20 m; 21 f)	N: 53 (27 m; 26 f) F: 13 (3 m; 10 f)

Cuba

General information

In Cuba, postgraduate training in public health is available at the Instituto de Desarrollo de la Salud, Havana.[1] The institution is part of the Ministry of Public Health, operating under the direct jurisdiction of the Minister with the technical supervision of the Postgraduate Teaching Division. It is financed mainly by the State, with some assistance from international organizations.

The academic year begins in September and ends in July. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 1 year.

(2) Health Administration speciality; the course lasts for 2 years.

(3) Biostatistics speciality; the course lasts for 3 years.

(4) Health Services Administration; the course lasts for 3 months.

Conditions of admission

Applicants for the M.P.H. course are required to hold a university degree in medicine, dentistry, or another discipline in the health field. Applicants for the other courses must hold a relevant basic qualification. National students are chosen by a special board of selection. There are no entrance, medical, or language proficiency examinations, and no age limit for admission. Foreign students are eligible for admission.

Tuition is free for national students and the institution provides a number of training grants. Foreign students are charged a tuition fee which, in the academic year 1981–1982, was Pesos 1250 for the M.P.H. course and Pesos 150–450 for the other courses.

Curriculum

A separate curriculum committee for each course is composed of members of the staff of the institution and representatives of the Ministry of Public Health. Analysis of the tasks of trained health workers in the public health field ensures that the courses are relevant to the health problems of the community.

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[1] The National Teaching Unit "Carlos J. Finlay", listed in the second edition of the *Directory*, has been disestablished.

The M.P.H. course is divided into 3 sections: (i) health and society; (ii) health services; and (iii) health systems. During the first 2 sections, students receive formal instruction and are introduced gradually to research methods. The first section includes a workshop on research methods, and all 3 sections include a supervised period of group research work in the field. Commencing in week 29 each student makes a study of a specific health problem in a provincial district of Cuba, applying the knowledge and skills acquired during the first 2 sections of the course; he then prepares a report on the results of his investigation. The number of hours of formal instruction amounts to 988.

Lectures, seminars, workshops, field visits, and field practice are the main methods of instruction, while problem-solving is used a little. The institution makes arrangements with various urban and rural health centres and community development field training areas for the practical training of its students.

Assessment of students

The performance of the students is evaluated at the end of each section of the course. Assessment is carried out by internal and external examiners. Methods of assessment include written and oral examinations, the observation of students in class and in the field, problem-solving exercises, and projects. A dissertation is obligatory.

Qualification

After having attended the necessary courses, carried out the required field work, succeeded in the intermediate and final examinations, and presented a satisfactory dissertation, candidates are awarded the degree of Master of Public Health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Instituto de Desarrollo de la Salud (G, S) Apartado de Correo 9082 Zona Postal 9 LA HABANA	1976	44	214	62

Czechoslovakia

General information

In Czechoslovakia, responsibility for the organization of further training for health personnel lies with institutions for the postgraduate training of physicians and pharmacists and other institutions for the further postbasic training of medium-grade medical workers. In the Czech Socialist Republic the institution for physicians and pharmacists is in Prague and that for medium-grade medical personnel is in Brno. In the Slovak Socialist Republic both institutions are in Bratislava. The institutions are under the administrative authority of the Ministry of Health of the Czech Socialist Republic and the Ministry of Health of the Slovak Socialist Republic, respectively, which also finance them.

The postgraduate medical and pharmaceutical institutes are headed by directors and consist of a number of departments responsible for training in the medical and pharmaceutical disciplines and also in other subjects of direct importance to the postgraduate training of physicians and pharmacists. The large departments (e.g., internal medicine, surgery, hygiene, public health) are divided into subdepartments, which provide postgraduate training in narrower specialities (subspecialization). For the purpose of practical training both the departments and the subdepartments have clinics in research institutions, large hospitals, and other facilities of the health services.

Departmental teaching practice is guided and controlled according to the latest achievements of research and the requirements of State public health policy. A scientific council advises the directors, while the heads of individual departments are given guidance in their own specialities by an advisory council. Each institution is involved in activities related to education, research, and health services. A library, a documentation centre, and teaching/learning materials, as well as a medical psychology unit, are available for the use of the students.

The department chiefly concerned with public health matters is that of social medicine and organization of health services, with its subdepartments of health information and statistics, health legislation and economics, and medical evaluation and sociology. Other departments involved in public health training are the Department of Hygiene (with subdepartments of industrial hygiene and the hygiene of children and adolescents), the Department of Epidemiology, the Department of Microbiology, and the Department of Tropical and Subtropical Diseases. There also exists a department dealing with the organization of the pharmaceutical services.

The academic year begins in September and ends in June. The languages of instruction are Czech in Prague and Slovak in Bratislava.

Courses offered

The training in public health consists of practical experience in social medicine and the organization of health services (a minimum of 2½ years), supplemented by supervised correspondence training and short residential courses. At Prague, students attend a preliminary full-time residential session at the institution (usually 3 weeks in the second year of practical work) and a final full-time session (6 weeks in the third year at the end of the course). At Bratislava, students attend residential courses at the institution for 3 months each year in 2 successive years.

Courses of up to 3 months' duration are organized for the purpose of completing specialist training in other fields. The institutions also arrange numerous short courses, lasting 1, 2, or 3 weeks, for the continuing education of physicians and pharmacists in a variety of subjects. These periodic courses, which deal with recent advances in a particular speciality, in the organization and management of health services, or in education and training in the health professions, are held regularly at intervals of 3–5 years.

The institution in Bratislava, in cooperation with WHO, organizes an annual international course on statistical and epidemiological methods in public health in the Russian language.

In addition to the above-mentioned courses, the institutions provide specialist and other training each year, in groups and individually, for numerous physicians from developing countries who wish to pursue studies in various fields of medicine. They are taught in the English, French, or Russian languages.

Conditions of admission

Applicants for admission to the initial session of training in social medicine and organization of health services must have completed their medical education and, in addition, have undergone special training in one of the primary basic disciplines (internal medicine, hygiene, etc.), with practical experience in the organization of services in public health establishments (usually of 1 year's duration). Entrance examinations are not held but a medical examination is obligatory. All training is free and for the duration of training the national student receives a full salary from his normal place of work. Students are provided with board and lodging. There is no age limit for admission and no formal language proficiency examination; however, foreign students are expected to be proficient in the language of the course they wish to follow.

Curriculum

Changes in the teaching programmes are suggested by a special committee at each institution and submitted to the respective Ministry of Health for approval. All subjects are compulsory, the number of hours of formal instruction amounting to 746 at Prague and 360 at Bratislava.

Lectures, seminars, workshops, and field visits are the predominant methods of instruction. Individual field practice, problem-solving, simulation, and role-playing are used to a lesser extent. Some courses use mainly self-instructional material. The institutions have arrangements with urban and rural health centres and community development field training areas for the practical training of their students.

A series of special courses on the management of health services based on primary health care is organized for general practitioners.

Assessment of students

Some of the courses involve formative assessment which keeps the students informed of their progress during the year. Methods of assessment include written and oral tests, the observation of students in class and in the field, and a thesis. Students in the social medicine and organization of health services course take theoretical and practical examinations twice a year, as a rule at the end of the final ordinary session following correspondence training. The board of examiners is appointed by the institution. In addition to questions on public health, the student must answer questions on general medicine and on Marxism-Leninism.. If the results of the examination are unsatisfactory, the student may make another attempt a year later. Examinations in the short-term refresher and other continuing education courses take the form of an evaluation of the student's performance during the course.

Qualification

After 2½ years of training (with 2 sessions of full-time study) and success in the examinations, the candidate receives a diploma or "attestation" in social medicine and the organization of health services. In Czechoslovakia, this qualification is obligatory for physicians working in responsible administrative posts in the Ministry of Health and in regional and district departments of health of the national committees, and for directors of integrated health facilities at regional and district levels. Physicians who have attended short refresher courses receive a certificate of attendance.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*[a]	*No. of students in the basic public health degree/diploma course*
Inštitut pre ďalšie vzdelávanie lekárov a farmaceutov (G, I, S) (Postgraduate Medical and Pharmaceutical Institute) Limbová 12 833 03 BRATISLAVA	1957	10 ft 3 pt	N: 252	N: 138

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Ústav pro další vzdělávání[a] lékařů a farmaceutů (G, I, S)[b] **(Postgraduate Medical and Pharmaceutical Institute)** **Ruská 85** **100 00 Praha 10**	1954	7 ft 39 pt	N: 339 (201 m; 138 f)	N: 28 (23 m; 5 f)

[a] All courses in social medicine and the organization of heatlh services; does not include students following courses in other specialities.

[b] 1981 figures.

Egypt

General information

In Egypt, postgraduate training in public health is available at the High Institute of Public Health, Alexandria, and at the faculties of medicine of all Egyptian universities. Egyptian universities are owned and financed by the Government, with some support from other public funds and the local authorities. They come under the jurisdiction of the Ministry of Education and the Supreme University Council. The High Institute of Public Health is self-governing but is administratively and academically attached to the University of Alexandria.

Each institution is directed by a dean and administered by the faculty board of the university. The High Institute of Public Health has its own board, which is headed by a dean and composed of the heads of its 9 departments, as well as 2 representatives from the Ministry of Health. The Board is responsible for instruction and details of the curriculum and all matters concerned with the running of the Institute. Policies, appointments, budget, and degree requirements are the responsibility of the University of Alexandria Council, of which the Dean of the Institute is a member.

Public health departments in all faculties of medicine are responsible for undergraduate and postgraduate training in public health and also for teaching public health subjects to students following courses in other departments.

The function of the High Institute of Public Health is to prepare personnel for the expansion of health programmes and special health projects in Egypt and neighbouring countries, in the light of recent developments in public health practice. Its training programmes are structured accordingly. It also carries out and sponsors research into the health problems of the region.

The aim of the Department of Public Health, University of Alexandria is to create physicians who are able to question, arrange, and apply their knowledge for the solution of the problems of the community, the family, and individuals; to work in a team; to educate the public; and to train others.

The academic year, which is divided into 2 semesters, begins in September or October and ends in July. At the Department of Public Health, University of Alexandria it begins in October and ends in September, but in April there is a supplementary intake of students whose course ends in May. The language of instruction is English; Arabic is used in some cases.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for a minimum of 2 years of study and is offered at all institutions.

(2) Doctor of Public Health (Dr P.H.); the course lasts for a minimum of 1 year of study after the award of the M.P.H. degree and is offered at the High Institute of Public Health, Alexandria and the Department of Public Health, University of Alexandria.

At Al-Azhar University, Cairo students may specialize in school health or occupational health. At the High Institute of Public Health. Alexandria both the degrees listed above may be obtained, with concentration in one of the following subjects; biostatistics, microbiology, health administration and medical care, maternal and child health, school health, health education, hospital administration, public health nursing, nutrition, food hygiene, occupational health, epidemiology, environmental health, public health engineering, sanitary engineering, tropical public health, public health entomology, vector control, rural health, dental public health, industrial hygiene, mental health, geriatric health, or social health. In the future, it is intended to add veterinary public health, public health laboratory services, and ionizing radiation to the 24 special subjects listed above.

(3) Master of Science (M.Sc.) in Public Health.

(4) Master of Science (M.Sc.) in Occupational Health.

(5) Doctor of Medicine (M.D.) in Public Health.

(6) Doctor of Medicine (M.D.) in Occupational Health.

Courses (3)–(6) last for 2 years and are offered at Ain Shams University, Cairo. Course (5) is also offered at the University of Zagazig.

(7) Master of Industrial Medicine; the course lasts for 2 years.

(8) Doctor of Industrial Medicine; the course lasts for a minimum of 2½ years.

Courses (7) and (8) are offered at the Department of Public Health, University of Alexandria and at the University of Zagazig.

The Faculties of Medicine of Ain Shams University, Cairo and the University of Alexandria also offer 2-year postgraduate courses in tropical medicine.

The High Institute of Public Health, Alexandria also offers 9-month programmes for non-graduates which lead to a certificate in a specific field of public health, such as biostatistics, occupational health, or health education. They are usually taught in the English language but may be given in Arabic if required. In addition, the Institute arranges short courses or seminars for various categories of public health worker, on special topics such as maternal and child health, diarrhoeal diseases, industrial safety, supervision of water installations, and rural health.

Conditions of admission

Applicants for the M.P.H., M.Sc., or M.D. courses must: (1) be graduates of an Egyptian university or of a recognized equivalent institution; applicants for the M.P.H. at the faculties of medicine must hold an M.B., Ch.B.; (2) at the University of Alexandria have acquired not less than 1 year of professional experience in an area of public health; and (3) at the High Institute of Public Health, Alexandria comply with the specific requirements of the department teaching their main subject. There is no age limit for applicants, no entrance examination, and no language proficiency examination. At some institutions applicants may be required to undergo a health examination. Foreign students are eligible for enrolment provided they are able to comply with the registration requirements.

Education in Egypt is free at all levels, including postgraduate education. Certain limited fees are charged for registration and other formalities. In the academic year 1979–1980 the fees varied from E.£ 16.5 to 50. In addition, foreign students are required to pay the cost of accommodation. The University of Alexandria provides training grants for its own staff but no other grants are available.

Curriculum

At all the institutions there is a curriculum committee, usually composed of the dean, vice-dean, representatives of different departments involved in the teaching, and, in some cases, a representative of the Ministry of Health.

At the present time the teaching of public health in Egypt is evolving and the curricula are being revised. The 1-year D.P.H. course previously offered has been replaced by the 2-year M.P.H. course which allows study in greater depth. Most institutions allow students to specialize in a particular area and to select courses and write their theses accordingly. The hours of formal instruction vary from institution to institution according to the subject chosen for specialization. The tasks the students will perform on graduation are being defined, and the courses reoriented to place more importance on study of the health problems of the community. The courses are generally field-oriented, emphasis being placed on practical work and field practice. Most of the institutions have urban or rural health centres or community development field training areas under their direct control and all make additional arrangements for their students to undertake field visits and practice.

The Department of Public Health, University of Alexandria is in the process of introducing new teaching methods, with emphasis on group discussion, problem-solving, and simulation, rather than on formal lectures. There is a small audiovisual laboratory and students design audiovisual and self-instructional materials. All students organize learning experiences for other groups of learners (undergraduate and nursing students as well as postgraduate students) thus gaining practical experience in training.

The management of health services based on primary health care is taught as part of health planning and management at the High Institute of Public Health, Alexandria and is being introduced into the curriculum at the Department of Public Health, University of Alexandria. At the University of Zagazig it is taught in the M.P.H. and M.D. in Public Health courses.

Assessment of students

At most of the institutions some of the courses include methods of assessment which keep the students informed of their progress.

At all the institutions methods of assessment include the observation of students in class and in the field, projects, written and oral examinations, and a thesis. Problem-solving exercises are used at some institutions. At the Department of Public Health, University of Alexandria, Ain Shams University, Cairo, and the University of Zagazig, success in the intermediate examinations is a requirement. A satisfactory record of attendance is a requirement at all the institutions.

At all the institutions assessment is carried out by internal and external examiners, and at some there is a special examinations committee.

Qualification

Candidates who have successfully completed the courses, carried out the requisite field work satisfactorily, passed the final examinations, and presented an acceptable thesis are awarded the degree of Master of Public Health or Doctor of Public Health.

In Egypt, a postgraduate qualification in public health is required for employment in senior posts in the Ministry of Health, the public health services, and various health organizations, and for teaching posts in public health at the universities.

Name and address	Year public health course started	Academic year 1979–1980		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)
High Institute of Public Health (G) University of Alexandria 165 El-Horreya Avenue ALEXANDRIA	1956	52 ft	N: 84 (51 m; 33 f) F: 14 (12 m; 2 f)	N: (76) (50 m; 26 f) F: 13 (11 m; 2 f)
Department of Public Health (S) Faculty of Medicine University of Alexandria ALEXANDRIA	1959	14 ft 10 pt	N: 258 (205 m; 53 f) F: 10 m	N: 5 (2 m; 3 f)
Department of Public Health, Preventive Medicine and Industrial Hygiene Faculty of Medicine Asyût University ASYÛT		5 ft 1 pt	N: 3 (2 m; 1 f)	N: 3 (2 m; 1 f)
Departments of Community, Environmental and Occupational Medicine (G, S) Faculty of Medicine Ain Shams University P.O. Box 38 Abbassia CAIRO	1950	30 ft 10 pt	N: 136 (80 m; 56 f) F: 28 (22 m; 6 f)	N: 12 F: 4
Department of Community Medicine, Public Health and Preventive Medicine (G, I, S) Faculty of Medicine Al-Azhar University Madinet Nasr CAIRO	1971	7 ft	N: 224 F: 7	N: 2 m
Department of Public Health, Preventive Medicine and Industrial Hygiene University of Cairo Kasr-el-Eini CAIRO	. .	. .	. .	. .
Department of Public Health, Preventive Medicine and Industrial Hygiene University of Mansûra MANSÛRA	. .	. .	. .	. .
Department of Public Health, Preventive Medicine and Industrial Hygiene University of Tanta TANTA	. .	. .	. .	. .
Department of Public Health and Industrial Medicine (G, I, S) University of Zagazig ZAGAZIG	1973	3 ft	. .	N: 9 (5 m; 4 f)

Ethiopia

General information

In Ethiopia, postgraduate training in public health is available at the Department of Community Health, Faculty of Medicine, Addis Ababa University. The Faculty of Medicine, which is headed by a dean, was opened in 1965, and the postgraduate course in public health began in 1982. Addis Ababa University is an autonomous institution financed mainly by the Government, with assistance from international sources; it operates under the jurisdiction of the Commission for Higher Education. The Department of Community Health is administered by the Academic Commission of the Faculty of Medicine as regards undergraduate education and by the Faculty Graduate Commission as regards postgraduate education.

The academic year begins in October and ends in August. The language of instruction is English.

Courses offered

The following course is organized:

Master of Public Health (M.P.H.); the course lasts for 2 academic years of part-time study.

Conditions of admission

Applicants must hold a degree in medicine or a health-related field and have had at least 2 years of professional experience. Letters of recommendation and sponsorship by an institution are also required, as all students are required to undertake relevant part-time work during their training; for instance, in the Ministry of Health, the Central Laboratory, or the Faculty of Medicine of the University. Foreign applicants must agree to engage in part-time work in Ethiopia. There is no entrance examination, no language proficiency examination, no age limit, and no health requirements. Tuition is free of charge.

Curriculum

The curriculum is reviewed at two levels: (1) by the Faculty Graduate Commission, which consists of the Dean, the heads of all the departments that have postgraduate programmes, and a representative of the Ministry of Health; (2) by a committee consisting of the Head and 2 members of the Department of Community Health and 2 members of other departments with postgraduate programmes. In order to ensure that the curriculum is competency-based, the tasks a master of public health should be able to perform were defined at a workshop of members of the Faculty, members of the different departments, and representatives of the Ministry of Health. Similar workshops will be held as needed.

The course consists of obligatory and elective subjects with a total of 1482 hours of formal instruction.

Problem-solving and field practice are the main methods of instruction; lectures, seminars, workshops, and field visits are used to a lesser extent, and self-instructional material is used a little. The Department has arrangements with rural health centres and community development field training areas for the practical training of its students.

Assessment of students

Through some examinations the students are kept informed of their progress during the course. The final examination involves written, oral, and practical tests. Methods of assessment include the observation of students in class and in the field, problem-solving exercises, and projects. Satisfactory performance in the intermediate examinations and the submission of a thesis are required. The examinations are conducted by internal and external examiners.

Qualification

After having succeeded in the requisite examinations and submitted a satisfactory thesis, candidates are awarded the degree of Master of Public Health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*
Department of Community Health (G, I) Faculty of Medicine Addis Ababa University ADDIS ABABA	1982	4 ft 2 pt	—	—

France

General information

In France, postgraduate training in public health is provided by a number of university medical teaching and research units (*Unités d'Enseignement et de Recherche médicale (U.E.R.)*) and by the National School of Public Health, Rennes (*Ecole nationale de Santé publique (E.N.S.P.)*).

The U.E.R.s are parts of their universities, which come under the jurisdiction of the Ministry of National Education, and are headed by deans. Certain of them organize a Certificate in Special Studies in Public Health (*Certificat d'Etudes spécialisées de Santé publique*) course, as obligatory supplementary training for physicians wishing to become public health officers. The situation described below is that which existed during the years 1982–1983. Subsequent reorganization, which still continues, is introducing fundamental modifications. Legislation in regard to the teaching of public health was due to change considerably in 1984 when public health was to become one of the 6 disciplines in the curriculum for medical students.

The function of the E.N.S.P., as stated in the law of 28 July 1960, is to organize the teaching of public health and welfare administration for the purpose of training personnel for health and social welfare activities, and specialists wishing to improve their knowledge in these fields. Its main objective is thus to produce trained professional public health personnel for State and hospital employment. Some of the shorter courses are decentralized and are organized in cooperation with other institutions in various parts of the country. Operational research in public health is undertaken, particularly as it relates to the solution of concrete problems involving epidemiology, primary health care, the planning and evaluation of health services, health economics, and administrative management. Documentation services are provided to the Secretariat of State for Health and to its external services, hospitals, teaching establishments, social welfare organizations, and all those who have access to the library services.

The E.N.S.P. is an autonomous institution, financed from public funds, operating under the authority of the Secretariat of State for Health and the Ministry of Social Affairs and National Solidarity. It is administered by an administrative board and a director, assisted by an education committee.

At the U.E.R.s the academic year begins in October and ends in May or June; at the E.N.S.P. it begins in January and ends in December, but some courses begin in October and end in September.

The language of instruction is French.

Courses offered

At the E.N.S.P. training is available for several types of public health professional, to allow them to pursue their professions. A distinction should be made between the officers of the Secretariat of State for Health and the Ministry of Social Affairs and National Solidarity—public health officers (medicine), public health officers (pharmacy), health and welfare officers, trainees at the National Institutes for Deaf Adolescents – and students not in public service—trainee assistant directors of public hospitals, assistant general nurses, future directors of welfare establishments, sanitary engineers, senior sanitary technicians, nurse educators in public health, public health auxiliary personnel.

As regards the types of training, a distinction should be made between the basic training (which varies in length according to the career chosen), training in preparation for specific posts, and continuing education.

The following courses are organized at the E.N.S.P.:

(1) State Diploma in Public Health (*Diplôme d'Etat de Santé publique (D.S.P.)*) (Physician).

(2) State Diploma in Public Health (Pharmacy).

(3) Course for trainee public health and welfare inspectors leading to the confirmation of their professional posts.

(4) Diploma course in public health for auxiliary health personnel; the course is intended for personnel in managerial or teaching positions in the public health services of developing countries.

Courses (1)–(4) last for 12 months.

(5) Holders of an engineering diploma may take an advanced course in environmental health; it lasts for 1 year and begins in October. Depending on their entry qualifications and the institution they have previously attended, successful candidates are awarded one of the following: (i) Diploma in Sanitary Engineering; (ii) Diploma in Public Health (Environmental Health); (iii) a diploma from their school of origin and an attestation from the E.N.S.P.

(6) Diploma course for senior sanitary engineering technicians; the course lasts for 1 year and begins in October.

(7) Certificate in public health nursing; the course, which is intended for national nursing personnel, lasts for 9 months and begins in January.

(8) Certificate course for hospital administrators. The course is conducted in 2 parts: (i) 1 year of study consisting of 2 periods of academic work, divided by a period of practical work, at the end of which the successful candidate receives the title of *Assistant de Direction*; (ii) 2 years of practical work in a hospital of at least 500 beds during which the student attends seminars at the E.N.S.P. and prepares a dissertation. At the end of the 3 years of training, the *assistants de direction* are appointed as hospital administrators (third class).

In addition, a number of courses, lasting 5–6 months, are organized, consisting partly of theoretical and partly of practical work. Among them are: (i) a course for teachers of deaf children, organized in Paris and the provinces under the auspices of the E.N.S.P.; (ii) a course for directors of national children's homes and educational establishments for handicapped children; (iii) a course for directors of rehabilitation centres for handicapped adults (*Centres d'Aide par le Travail*); (iv) a course for general nurse assistants; (v) a course for directors of private homes for handicapped or maladjusted children; (vi) a course for directors of family planning centres.

The E.N.S.P. also organizes numerous shorter professional training courses, both basic and continuing, which various categories of personnel in the national health service are obliged by law to follow. There are correspondence courses for those seeking posts in hospital administration or employment as health and welfare inspectors.

In collaboration with the specialized agencies of the United Nations, seminars are organized on a given problem, in which a limited number of French and foreign experts participate. In addition, international public health training activities are being developed, according to the requests and specific needs of the institution's correspondents. Such activities include: teacher training, in-service training, on-the-spot technical pedagogical advice, and exchange and joint arrangements and training contracts with other training institutions in France and other countries.

The following courses are organized at the U.E.R.s:

(1) Certificate in Special Studies in Public Health (*Certificat d'Etudes spécialisées de Santé publique (C.E.S.)*); the courses extend over 1 or 2 academic years, as decided by the university councils and are organized at Bordeaux, Lyons, Aix-Marseilles, Nancy, Paris (a joint course of Paris VI, VII, XI, and XII), Rennes, Rouen (a joint course with Amiens), and Toulouse.

(2) Certificate in Family Health; the course lasts for 9 months and is offered at Nancy.

(3) International Course in Hospital Hygiene; the course lasts for 2 years and is offered at Rouen.

(4) Courses lasting 3 weeks to 12 months on public health subjects such as epidemiological methods, alcoholism and toxicology, or health and development.

The following paragraphs relate particularly to the State Diploma in Public Health (Physician) course and the Certificate in Special Studies in Public Health course.

Conditions of admission

The State Diploma in Public Health (Physician) (*D.S.P.*) course is open to:

(1) prospective medical officers of health who have passed the written and oral entrance examination;

(2) applicants who hold the French State Diploma of Doctor of Medicine or a recognized equivalent foreign diploma, who are admitted without examination; and

(3) qualified veterinarians and dental surgeons; (the basic degree of a successful candidate is indicated in the title of the diploma awarded).

The conditions of admission for foreign students are laid down by the E.N.S.P. authorities in agreement with the ministries responsible for external relations and cooperation. Applicants must be supported by their governments or an international organization and produce an attestation stating that they know enough French to be able to follow the instruction.

There is no age limit for admission. A medical examination is required. Tuition fees are charged; in 1983 the fee was F 3400. No training grants are provided by the institution.

The Certificate in Special Studies in Public Health (*C.E.S.*) course is open to applicants who hold:

(1) the French State Diploma of Doctor of Medicine;

(2) a foreign degree in medicine which allows its holder to practise;

(3) medical students who have completed the period of practical work at the end of their undergraduate courses;

(4) applicants who hold a university diploma of doctor of medicine (*Diplôme d'Université de Docteur en Médecine*) judged by the relevant university council to be of an acceptable level.

Applicants in the following categories are allowed to follow the course, but will receive an attestation, not the Certificate:

(*a*) holders of a French or foreign degree in veterinary science, pharmacy, or dentistry, or a doctor's degree in the same disciplines;

(*b*) sanitary engineers;

(*c*) persons with degrees and expertise recognized as comparable to *(a)* or *(b)* above.

Applicants must take an entrance examination and in some cases a medical examination. Tuition fees are charged; during the academic year 1980–1981 the fee was F 600.

Curriculum

A curriculum committee at the E.N.S.P. is headed by the Director and composed of the heads of the teaching departments, representatives of the Secretariat of State for Health, and members of the student body.

The Ministry of National Education set up a commission to establish the curricula of the U.E.R.s on a national basis. At Lyons a curriculum committee, composed of staff from the Department of Public Health (10 members) decides on the application of the Ministry's directives.

At the E.N.S.P. seminars, workshops, and field visits are the primary methods of instruction; lectures, self-instructional material, simulation, role-playing, and practical work are also used. The number of hours of formal instruction for the *D.S.P.* course totals 600. Arrangements are made with urban and rural health centres and community development field training areas for the practical training of the students.

At the U.E.R.s the *C.E.S.* course consists of 5 modules—epidemiology, health economics, health and the environment, health systems, and health and prevention—with a total of 300 hours of instruction. Methods of instruction include lectures, seminars, and discussion groups. In addition, students undertake practical work in the services or organizations responsible for disease prevention, hygiene, social welfare work, and public health in general. Field work in services attached to the Secretariat of State for Health is organized with the agreement of the regional health officer.

At the E.N.S.P. the management of health services based on primary health care is taught in the courses given to physicians, pharmacists, and auxiliary personnel. This subject is also taught at the U.E.R. in Nancy as part of health and prevention, and health and development.

Assessment of students

At the E.N.S.P. methods of assessment include the observation of students in class and in the field, practical and problem-solving exercises, and written and oral examinations. The final examinations take place before a special board of examiners and cover all the subjects studied. In addition, students are required to present and defend a dissertation.

At the U.E.R.s the examinations are held in 2 parts, each consisting of a single session. The methods of assessment of the first part of the examination are determined by the authorities of each U.E.R. Students must obtain a mark of 10 out of 20 in order to be allowed to continue their studies. As a temporary measure, physicians who have succeeded in the competitive examination for the recruitment of public health officers are exempted. Students must have satisfactory records of attendance to be allowed to sit the examinations. The final examinations are written and cover all the subjects studied. They are assessed by a national board of examiners, which includes at least 4 members designated by the minister in charge of universities from among the faculty who have taught the course. The preparation and defence of a dissertation are also required.

Qualification

Candidates who have completed the necessary assignments, succeeded in the examinations, and presented a satisfactory dissertation are awarded the *Diplôme d'Etat de Santé publique* (*D.S.P.*) or the *Certificat d'Etudes spécialisées de Santé publique* (*C.E.S.*). In France possession of one of these qualifications is a prerequisite for appointment to the post of medical officer of health (*médecin inspecteur de la santé*) and is also desirable for candidates for other posts such as in health and social administration, the social security services, or maternal and child health.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
U.E.R. de Médecine (G) Ancienne Faculté de Médecine Université de Bordeaux Place de la Victoire 33076 BORDEAUX CEDEX	1958	6 ft	. .	N: 30 F: 10
U.E.R. de Médecine Lyon Nord (G) Université Claude-Bernard 8 avenue Rockefeller 69008 LYON CEDEX 08		8 ft 2 pt	N: 163 (78 m; 85 f) F: 13 (8 m; 5 f)	N: 94 (39 m; 55 f) F: 3 (2 m; 1 f)

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
U.E.R. de Médecine et Santé tropicale (G) Université d'Aix-Marseille 27 boulevard Jean Moulin 13005 MARSEILLE	1971	40 pt	48	48
U.E.R. de Médecine (G, I, S) Université de Nancy I 9 avenue de la Forêt de Haye B.P. 184 54505 VANDOEUVRE-LES-NANCY CEDEX	1925[a]	5 ft 15 pt	N: 269 (149 m; 120 f) F: 22 (19 m; 3 f)	N: 196 (114 m; 82 f) F: 13 m
U.E.R. de Médecine Saint-Antoine (G, I) Université de Pierre et Marie Curie (Paris VI) 27 rue Chaligny 75571 PARIS CEDEX 12	1976	1 ft 2 pt	..	..
Ecole nationale de la Santé publique Avenue du Professeur Léon Bernard 35043 RENNES CEDEX	1946[b]	50 ft about 2000 visiting lecturers	438	N: 42
U.E.R. de Médecine (G) Université de Rennes I Avenue du Professor Léon Bernard 35043 RENNES CEDEX	1964[c]	1 ft 13 pt	N: 75 (33 m; 42 f)	N: 10 (7 m; 3 f)
U.E.R. de Médecine et de Pharmacie de Rouen (G) Université de Haute-Normandie Avenue de l'Université B.P. 97 76800 SAINT-ETIENNE-DU-ROUVRAY	1970	3 ft	..	..
U.E.R. de Médecine Toulouse Rangueil (G) Université de Toulouse III 133 route de Narbonne 31077 TOULOUSE CEDEX		2 ft 10 pt	..	..

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[a] 1983–1984 figures.

[b] Year in which instruction began at the National School of Public Health (E.N.S.P.) then located in Paris; since 1962 the E.N.S.P. has been located in Rennes.

[c] 1980–1981 figures.

Federal Republic of Germany

General information

In the Federal Republic of Germany, postgraduate training in public health is available at institutions in Düsseldorf and Munich.

At Düsseldorf the courses are offered at the Academy of Public Health (*Akademie für öffentliches Gesundheitswesen*), an institution serving the states (*Länder*) of Bremen, Hamburg, Hessen, Lower Saxony, North Rhine-Westphalia, Schleswig-Holstein, and Berlin (West). The chief administrative body of the institution is the Board of Trustees, comprising the senior medical officer of the government of each of the states concerned. The tasks of the Board of Trustees include: the election of the President who is the head of the institution; the revision of the teaching programme and examination regulations; the supervision of educational activities; and the drawing up of the budget. The examination regulations and the budget are subject to the authorization of the state governments. The institution is financed by the states maintaining it and by the national Government.

The institution in Munich is operated by the Department of Health, Ministry of the Interior of the State of Bavaria and offers postgraduate training for physicians in the states of Baden-Württemberg, Bavaria, Rhineland-Palatinate, and Saarland. Its expenses are met by the State of Bavaria. An advisory committee exists, whose members include medical experts from all the states concerned. The course is directed by the chief medical officer.

At Düsseldorf the academic year begins in October and ends in July; at Munich it begins in April and ends in March. The language of instruction is German.

Courses offered

The following courses are organized:

(1) Course for physicians intending to become public health officers; the course lasts for 6 months and is offered at both institutions.

(2) Course for health inspectors (sanitarians); offered at both institutions and lasting 4 months at Munich and 5 months at Düsseldorf.

(3) Course for food inspectors; offered at both institutions and lasting 3½ months at Düsseldorf and 4 months at Munich.

(4) Course for sociomedical assistants; offered at both institutions and lasting for 3 months.

Conditions of admission

Applicants for admission must: (1) hold the degree of Doctor of Medicine from a German university (or an equivalent degree in the case of foreign applicants); (2) have completed at least 2 years of practice following graduation; (3) have acquired at least 3 months' practical experience in psychiatry; and (4) have accomplished at least 5 months of satisfactory work in the public health services.

There is no age limit for admission. A medical examination is required at Düsseldorf. Instruction is free at both institutions, except for students who are not employed in the local or national public health services, who must pay a fee of DM 900. Foreign students are eligible for enrolment provided they hold a basic medical degree and have a sufficient command of the German language.

Curriculum

At both institutions the curricula are designed and revised by curriculum committees. At Düsseldorf the committee is composed of the President of the Academy, representatives of the state ministries of health and from among public health officers, and representatives of the staff (teachers and educational experts) and the students in the course. At Munich it is composed of members of the health services of Bavaria and the other states with students attending the course and a representative of the Faculty of Medicine, University of Munich. At Munich a special evaluation system is being developed to ensure the relevance of the course curriculum to the health services.

The courses at both institutions are largely theoretical, since students are normally already employed in the health services. Lectures, seminars, and workshops are the main methods of instruction, supplemented by field visits and, in the case of Munich, field practice. Self-instructional material is also used. All subjects are obligatory, the total number of hours of formal instruction being 700 at Düsseldorf and 617 at Munich. Since foreign students are not employed in the health services they are required to complete 6 months of practical training at a health care institution after the theoretical part of the course.

Assessment of students

At both institutions the examinations consist of written, oral, and practical tests and cover all the subjects studied. They are held before a state board of examination of public health officers, consisting of a chairman and of at least one member for every subject to be examined. The examiners are chosen from among the teaching staff.

Students at Düsseldorf are required to write, and submit within 6 months from the date of the examination, a paper on a given subject chosen by the State Board of Examination.

Qualification

Candidates who have fulfilled the examination requirements are awarded certificates. In the Federal Republic of Germany, this qualification is required of all physicians working as medical officers of health or deputy medical officers in state health departments. In Bavaria, all physicians wishing to enter the civil service must produce evidence that they have passed the examination for the certificate.

		Academic year 1979–1980		
Name and address	*Year public health course started*	*No. of teaching staff*	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Akademie für öffentliches Gesundheitswesen (G, I) **Auf dem Hennekamp 70** **4000 DÜSSELDORF 1**	1921	12 ft 180 pt	N: 139 (102 m; 37 f) F: 1 m	N: 26 (15 m; 11 f)
Akademie für das öffentliche Gesundheitswesen **Bayerische Staatsministerium des Innern** **Odeonsplatz 3** **8000 MÜNCHEN 22**	1882	74 pt	N: 126 (81 m; 45 f)	N: 32 (20 m; 12 f)

Ghana

General information

In Ghana, postgraduate training in public health is available at the Department of Community Health, University of Ghana Medical School. As part of the University, the institution comes under the jurisdiction of the Ministry of Higher Education, which provides most of its financial support with assistance from overseas donor agencies. The Medical School is headed by a dean and administered by the Faculty Board.

The academic year begins in September and ends in June. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 12 months, including 1 month of field practice.

(2) Courses to prepare candidates for the Primary and Part I examinations in public health of the West African College of Physicians, Yaba, Lagos, Nigeria.

Conditions of admission

Applicants for the M.P.H. course must have a basic medical degree (M.B.,Ch.B., or equivalent). They are required to take an entrance examination and undergo a health examination. There is no age limit for admission. Foreign students are admitted; they may be required to demonstrate their proficiency in the English language.

Tuition fees are charged. In the academic year 1980–1981 the fee was Cedi 3780. Non-African students were charged Cedi 5155.

Curriculum

The curriculum for the M.P.H. course is prepared by staff of the Department of Community Health and approved by the Postgraduate Committee, which is composed of the Dean of the Medical Faculty, a representative of the Ministry of Health, the Head of the Department of Community Health, and other faculty of the Medical School. The curriculum comprises the following obligatory subjects, with a total of 1000 hours of formal instruction: statistics, epidemiology, and demography; family health, including nutrition; the behavioural sciences; environmental and occupational health; and health administration and management, including primary health care. Students spend a compulsory period of 1 month in the field collecting data for their dissertations.

Lectures, seminars, workshops, field visits, and field practice are the predominant methods of instruction, while simulation and self-instructional material are used a little. The institution has a rural health centre under its direct control and also makes arrangements with rural and urban health centres and community development field training areas for the practical training of its students.

Assessment of students

During all the courses assessement keeps the students informed of their progress.

The final examinations are conducted by internal and external examiners, and consist of written, oral, and practical tests. Methods of assessment include the observation of students in class and in the field, problem-solving exercises, and projects. A satisfactory record of attendance and success in the intermediate examinations are also required, as is the presentation of a dissertation.

Qualification

After having completed the course, succeeded in the final examination, and had his dissertation accepted, a candidate is awarded the degree of Master of Public Health. In Ghana, a postgraduate qualification in public health is required for employment in the posts of district, city, or regional medical officer of health, epidemiologist, or family health medical officer.

Name and address	*Year public health course started*	*Academic year 1980–1981*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Community Health (G, I) Medical School University of Ghana P.O. Box 4236 ACCRA	1980	10 ft 20 pt	N: 60	N: 5 (3 m; 2 f)

Greece

General information

In Greece, postgraduate training in public health is available at the School of Hygiene, Athens, a tax-supported State institution operating under the jurisdiction of the Ministry of Health and Social Welfare. It is administered by a faculty board. The chief executive officer of the School is the Dean, who is elected for a period of 2 years.

In addition to its principal functions—teaching and research in public health—the School of Hygiene coordinates the teaching programme of the Rural Public Health School, Fársala.

The academic year begins in October and ends in September. The language of instruction is Greek.

Courses offered

The following course is organized:

Diploma in Public Health (D.P.H.) (*Diploma iatrou hygienologou*); the course lasts for 12 months.

Conditions of admission

The basic requirement for admission to the D.P.H. course is possession of a medical or veterinary degree. Applicants with an engineering or a chemistry degree are also admitted. There are no health requirements. Applicants must take an entrance examination, which includes a test of proficiency in a foreign language (English, French, Italian, or German). Foreign students are admitted. Instruction is free of charge.

Curriculum

The curriculum of studies is designed and revised by the Faculty Board. All subjects are obligatory, with a total of 1123 hours of formal instruction. Lectures, seminars, problem-solving exercises, field visits, and field practice are the predominant methods of instruction; role-playing and self-instructional material are also used. The institution has special arrangements for the practical training of its students with urban and rural health centres, health services, outpatient departments, maternal and child health centres, hospitals, and rehabilitation centres.

Assessment of students

An examination is held at the end of each semester and covers all the subjects studied. It is internal, conducted by members of the teaching staff, and consists of written, oral, and practical tests. A satisfactory record of attendance and a thesis are also required.

Qualification

After having passed the requisite examinations and presented an acceptable thesis, the candidate is awarded the Diploma in Public Health. In Greece, this Diploma is a requirement for employment in a number of posts at the Ministry of Health and Social Welfare.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
School of Hygiene 196 Avenue Alexandria ATHENS 602	1930	15 ft	N: 20 (10 m; 10 f) F: 1 m	N: 20 (10 m; 10 f) F: 1 m

Hungary

General information

In Hungary, postgraduate training in public health is available at the Postgraduate Medical Institute, Budapest. The Institute is a self-governing institution of higher learning, owned by the Government and operated under the jurisdiction of the Ministry of Health. It has the status of a university and is headed by a rector.

The Institute consists of 29 departments for the postgraduate and specialist training of physicians and pharmacists; only 4 departments are concerned with public health teaching.

After having obtained the basic medical degree, students who wish to specialize in public health must acquire 4 years of practical experience, during which time they attend the necessary courses on a part-time basis. Students in all the courses are State employees in various branches of the public health services and receive their normal salaries for the duration of their studies. The topic of a student's thesis will usually be related to the field in which he is employed.

The academic year begins in January and ends in December. The language of instruction is Hungarian.

Courses offered

The following courses are organized:

(1) Certificate in Health Administration.

(2) Certificate in Public Health and Epidemiology.

Both courses last for 24 months of part-time study.

In addition, the following courses are organized: biometry (1 month of full-time study); a course for industrial physicians (2 months of full-time study); a course for managers of public health (2 weeks of full-time study); a course on the realization of principles of socialist health systems (2 weeks of full-time study); a course on dispensing. Other short refresher courses are also offered.

Conditions of admission

There is no age limit for admission. Applicants must be in possession of the basic university medical diploma and have acquired several years of practical experience in public health. There is no medical, entrance, or language proficiency examination. Tuition is free of charge. A daily allowance is provided to students who are obliged to travel from a distance to attend the courses.

Curriculum

The management of health services based on primary health care is taught during the course for managers of public health and the special course on dispensing.

A curriculum committee for the Certificate in Health Administration course is composed of the Rector and elected members. All subjects are obligatory, with a total of 252 hours of formal instruction. Seminars and lectures are the predominant methods of instruction; field visits, field practice, and self-instructional material are also used. The Institute has arrangements with urban and rural health centres and community development field training areas for the practical training of its students.

Assessment of students

Some of the courses of instruction within the Certificate in Health Administration course involve formative assessment which keeps the students informed of their progress. Methods of assessment include the observation of class participation, projects, problem-solving exercises, written and oral examinations, and a thesis. If the end of the training period does not coincide with the end of the 4 years of practical experience, students must take an end-of-course examination at the end of the training period and the final examination on completion of the required period of practical experience. The final examination, consisting of written, oral, and practical tests, is held before a board of examiners, the members of which must include at least 1 external examiner. A satisfactory record of attendance and a thesis are also required.

Qualification

After having completed the course and passed the requisite examinations, candidates obtain the Certificate in Health Administration. In Hungary, this qualification is a requirement for leaders of county and city People's Council health departments, hospital directors, directors of polyclinics, and other senior health administrators. The Certificate in Public Health and Epidemiology is required for specialists working in the different branches of the sanitary and epidemiological centres (*sanepids*) and for the position of hygiene and epidemiological inspector working under the Ministry of Health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*
Orvostovábbképző Intézet (G, I, S) (Postgraduate Medical Institute) Szabolcs utca 33/35 1135 BUDAPEST XIII	1961	7 ft 7 pt[a]	N: 128 (90 m; 38 f)	N: 70[b] (45 m; 25 f)

[a] Special guest lecturers are also invited.

[b] Certificate in Public Health and Epidemiology course.

India

General information

In India, postgraduate training in public health is available at 35 institutions, all of which, with the exception of the All-India Institute of Medical Sciences, New Delhi, are affiliated to a state university. Thirty of the institutions are departments of medical colleges that provide undergraduate and postgraduate training in public health. They operate under the jurisdiction of the department of health and family welfare of the government of the state in which they are located, through the directorate of medical education and research. The Topiwala National Medical College and the Seth G.S. Medical College both come under the administrative control of the Municipal Corporation of Greater Bombay. The Armed Forces Medical College, Pune functions under the joint authority of the Ministry of Defence and the Medical Council of India. Most of the institutions are financed by the Government of India; those whose main sources of income come from the local authorities receive national grants in some instances. The Christian Medical College, Vellore is a privately funded institution, attached administratively to the University of Madras. The chief executive officer of an institution is a director, principal, or dean; the Armed Forces Medical College, Pune is headed by a commandant.

The All-India Institute of Medical Sciences, New Delhi, is an autonomous institution of university status which provides undergraduate and postgraduate training. It is financed by, and comes under the jurisdiction of, the Government of India, and is headed by a director.

The National Institute of Health and Family Welfare, New Delhi is an autonomous institution under the jurisdiction of the Ministry of Health and Family Welfare and affiliated to the University of Delhi. It is administered by a governing council headed by the Union Minister of Health and Family Welfare. The Institute is financed by the Government of India and grants from public funds. At its head is a director.

The Jawaharlal Institute of Postgraduate Medical Education and Research is a separate institution attached to the University of Madras. It is financed by the Government of India and comes under the jurisdiction of the Ministry of Health and Family Welfare.

The All-India Institute of Hygiene and Public Health, Calcutta is a self-governing institution, financed mainly by the Government of India and affiliated to the University of Calcutta. At present it has 15 departments which impart training in public health to physicians and other health personnel. In addition, the staff of the Institute carry out pure and applied research in public health, and evolve methods of utilizing the findings of research in public health practice. It is also one of 3 central family planning institutes serving the country's eastern region. At the head of the Institute is a director.

The Calcutta School of Tropical Medicine is a separate institution attached to the Faculty of Tropical Medicine and Hygiene, University of Calcutta. It is administratively linked to the Government of West Bengal and financed by the Government of India, grants from public funds and, to a lesser extent, the local authority. It is headed by a director. It provides postgraduate training in tropical medicine and hygiene and assistance and advice on various problems related to tropical diseases to medical practitioners, institutions, and governmental and other organizations.

Diplomas and degrees are granted by the university to which the teaching institution is affiliated, except in the case of the All-India Institute of Medical Sciences, New Delhi, which grants its own degrees.

The language of instruction is English. The academic year runs from January to December at some institutions, and from June to April or October to July at others, depending on the course taken.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.); the course lasts for 1 or 2 years full time and is offered at the institutions in Hyderabad (Andhra Pradesh), Panaji (Goa), Bangalore (Karnataka), Jaipur (Rajasthan), Baroda (Gujarat), Trivandrum (Kerala), Aurangabad, Bombay (all 3 institutions listed), and Pune (Maharashtra), Lucknow (Uttar Pradesh) and the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal). At Bangalore it may also be followed part time.

(2) Diploma in Community Medicine and Health; the course lasts for 1 year and is offered at the institution in Amritsar (Punjab).

(3) Doctor of Medicine (Social and Preventive Medicine) (M.D. (S.P.M.)); the course lasts for 2 or 3 years after the basic medical qualification and is offered at all the institutions, with the exception of Andhra Medical College, Visakhapatnam (Andhra Pradesh), Christian Medical College, Vellore (Tamil Nadu), the Calcutta School of Tropical Medicine (West Bengal), the National Institute of Health, New Delhi (Delhi), and the institutions in Baroda (Gujarat) and Udaipur (Rajasthan).

(4) Doctor of Medicine (Community Medicine) (M.D. (Community Medicine)); the course lasts for 2 years after the basic medical qualification and is offered at the Andhra Medical College, Visakhapatnam (Andhra Pradesh), the Christian Medical College, Vellore (Tamil Nadu), and at the institutions in Baroda (Gujarat), Pondicherry, and Udaipur (Rajasthan).

(5) Doctor of Medicine (Community Health Administration) (M.D. (Community Health Administration)); the course lasts for 2 years after the basic medical qualification and is offered at the National Institute of Health and Family Welfare, New Delhi (Delhi).

(6) Doctor of Science (Public Health) (D.Sc.P.H.); this degree, conferred by the University of Calcutta, is awarded to holders of the D.P.H. or an equivalent qualification after either at least 2 years of regular training at a recognized institution in a special public health project previously approved by the Faculty of Medicine, or at least 3 years of work at an approved laboratory in a special public health subject previously approved by the Faculty of Medicine. The training lasts for 2 years and is conducted at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal).

(7) Doctor of Philosophy (Public Health); the course lasts for 2 years and is offered at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal), and the All-India Institute of Medical Sciences, New Delhi (Delhi).

(8) Doctor of Philosophy (Social Medicine and Community Health); the course lasts for a minimum of 2 years and is offered at the Jawaharlal Nehru University, New Delhi (Delhi).

(9) Diploma in Tropical Medicine and Hygiene (D.T.M.&H); the course lasts for 9 months.

(10) Diploma in Clinical Pathology; the course lasts for 12 months.

(11) Diploma in Laboratory Techniques; the course lasts for 12 months.

(12) Licentiate in Tropical Medicine and Hygiene; the course lasts for 9 months.

Courses (9)–(12) are offered at the Calcutta School of Tropical Medicine and Hygiene (West Bengal).

(13) Master of Engineering (Public Health); the course is offered at the institution in Baroda (Gujarat) and at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal); at the latter institution it requires 2 years of training (1 year of theoretical and practical instruction and 1 year of supervised practice).

(14) Master of Veterinary Public Health (M.V.P.H.); the course lasts for 2 years (1 year of theoretical and practical instruction at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal), and 1 year at the Indian Veterinary Research Institute, Uttar Pradesh).

(15) Diploma in Industrial Health (D.I.H.); the course lasts for 1 year and is offered at the institutions in Baroda (Gujarat), Bangalore (Karnataka), and Kanpur (Uttar Pradesh), and at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal).

(16) Diploma in Public Health Nursing (D.P.H.N.); the course lasts for 1 year and is offered at the institution in Trivandrum (Kerala) and the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal).

(17) Diploma in Maternity and Child Welfare (D.M.C.W.).

(18) Diploma in Health Statistics (D.H.S.).

(19) Diploma in Health Education (D.H.E.).

(20) Diploma in Dietetics (Dip. Diet.).

(21) Certificate in Public Health Nursing Supervision.

(22) Certificate in Water and Sewage Analysis.

Courses (17)–(22) are offered at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal). The diploma courses, (17)–(20), are of 1 year's duration; and the certificate courses, (21) and (22), last for 13 and 10 weeks, respectively.

(23) A number of short courses, lasting from 1 to 3 weeks are available at the All-India Institute of Hygiene and Public Health, Calcutta (West Bengal) for various categories of personnel—e.g., orientation courses in primary health care for trainers or administrators, courses for port health officers and engineers.

(24) Health Inspectors Training Course; the course lasts for 12 months and is offered at Trivandrum Medical College (Kerala).

(25) The following short courses are offered at the National Institute of Health and Family Welfare, New Delhi (Delhi): Staff College course (2 months); hospital administration, health planning, implementation course (1 month); monitoring and evaluation and key trainers' course (1 month).

The following paragraphs relate particularly to the courses leading to the Diploma in Public Health, and the degrees of Doctor of Medicine

(Social and Preventive Medicine), Doctor of Medicine (Community Medicine), and Doctor of Medicine (Community Health Administration).

Conditions of admission

Applicants for admission to the courses leading to the D.P.H., M.D.(S.P.M.), M.D. (Community Medicine), M.D. (Community Health Administration), and the D.T.M.&H. must hold a basic medical degree (M.B.,B.S.) or an equivalent qualification recognized by the Medical Council of India. With the exception of those for the D.P.H. course, applicants must have spent at least 1 year in a hospital residency or have had equivalent experience. For the D.T.M.&H. course at Calcutta the residency should have been at a teaching hospital. For the degree of M.D. (Community Medicine) applicants without a hospital residency but with 5 years of state service may be accepted.

Applicants are selected by merit (i.e. marks obtained in the M.B.,B.S. examination). For the D.P.H. course preference is given to applicants with experience in rural health work, although this is not an obligatory requirement. At some institutions preference is given to applicants sponsored by the central or state government, an industrial concern, the railways, or other national organizations. The number of places available in certain courses for private applicants is limited. At the Armed Forces Medical College, Pune the selection of forces medical officers for postgraduate training is made by the Director General of Armed Forces Medical Services, on the basis of the officer's performance in the in-service course (the Medical Officer Junior Command course). Civilians may apply for the D.P.H. course offered at the Armed Forces Medical College and are selected by the Government of the State of Maharashtra which will sponsor them.

Applicants for the M.D.(S.P.M.) course at the institutions at Baroda, Sambalpur, Patna, and Aligarh, and at the Andhra Medical College, Visakhapatnam, the All-India Institute of Medical Sciences, New Delhi, and the All-India Institute of Hygiene and Public Health, Calcutta must take an entrance examination. Applicants to the institution at Baroda and to the All-India Institute of Medical Sciences, New Delhi must pass a language proficiency examination, and those to Baroda, Patna, Lucknow, Sambalpur, the Andhra Medical College, Visakhapatnam, and the All-India Institute of Medical Sciences, New Delhi must undergo a health examination. There is no age limit for admission but it is desirable that applicants should have some years of active service ahead of them. Foreign students sponsored by international health organizations and/or by their governments are eligible for admission.

Tuition fees are charged at all institutions and for all courses, with the exception of that at Aurangabad, where the Government sponsors all students. The fees vary from institution to institution; in 1980 they were Rps. 275–900 a year. However, students from the health services receive full allowances (at their last salary rates); at the majority of the institutions a limited number of stipends are available for students not attached to the government services.

Curriculum

At most of the institutions a special committee is responsible for the design and revision of the curriculum. It may be composed of the director and teaching staff of the institution or, in the case of a university to which several colleges are affiliated, the professors and heads of department of all the affiliated colleges; or this function may be discharged by the medical education and research committee or board of studies of the college. The curriculum of each course is approved by the board of studies of the medical college and by the academic council of the respective university; in the case of the Medical College at the Maharaja Sayajirao University of Baroda, the curricula are also approved by the Medical Council of India. The curricula of courses offered at the Armed Forces Medical College, Pune are designed and revised by the Curriculum Committee of the Pune University and the Armed Forces Medical Academic Committee.

The subjects studied in each course may vary considerably from institution to institution but all subjects in each curriculum are compulsory; the number of hours of instruction varies from approximately 400 to over 1800.

The major health problems of the area are taken into account when curricula are designed. The training is based on "learning by doing", and students are given ample opportunities for this during the course. They are posted in various institutions, such as hospitals for infectious diseases, public health laboratories, or vaccine institutes. Many of the institutions run urban or rural health centres and community development training areas as a service to the community, where students can do their field work. Information received from them on their practical field work permits the curriculum of the course to relate closely to the health needs of the people. Besides practical training and field visits, the students follow lectures and use self-instructional material available to them at the teaching institutions. They are given problem-solving exercises and specific projects, and participate in seminars and workshops. At some of the institutions simulation and role-playing methods are also used. Some of the institutions involve the students in the teaching of undergraduates and one includes guided study in the library as part of the programme.

The management of health services based on primary health care forms part of the course curricula in most of the institutions.

Assessment of students

At some of the institutions students are provided with information on their progress during the courses. Students who have completed the courses of instruction successfully and whose attendance and performance in field work and assignments have been found satisfactory, are eligible to present themselves for the final examination before a board of examiners. The board consists of internal examiners, and external examiners appointed from other Indian universities. The examination is written, oral, practical, and in some cases clinical.

Three months before the final examination candidates for the M.D. degree must present a thesis on an approved topic. A thesis is not required of D.P.H. students at most institutions.

Qualification

Candidates who have passed the final examination are awarded the Diploma in Public Health. After the thesis has been defended to the satisfaction of the examiners, a candidate is awarded the degree of M.D. (Social and Preventive Medicine), M.D. (Community Health Administration), or M.D. (Community Medicine).

In India, the Diploma in Public Health, or the degree of Doctor of Medicine in Social and Preventive Medicine or Community Health, is essential for candidates for senior posts in the public health services; research and consultative posts; specialist in public health posts in the Armed Forces or the Indian Railways; teaching posts above the rank of assistant professor in social and/or preventive medicine at medical colleges; posts of trainer at national and regional health institutions; and posts of public health officer in private or multinational concerns. The Doctor of Medicine in Community Health Administration degree is required for the position of health administrator in the community health services and hospitals.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
ANDHRA PRADESH				
Department of Postgraduate Public Health **Osmania Medical College** **Osmania University** **HYDERABAD 500001**	1960	..	..	..
Department of Social and Preventive Medicine (G.I.S)[a] **Andhra Medical College** **Andhra University** **VISAKHAPATNAM**	1951	9 ft 2 pt	..	N: 2 m
BIHAR				
Department of Social and Preventive Medicine (G.I.S) **Patna Medical College** **Patna University** **PATNA**	1962	5 ft 15 pt	..	N: 2 m
DELHI				
Centre for Community Medicine **All-India Institute of Medical Sciences** **Ansari Nagar** **NEW DELHI 110029**	1960	12 ft 2 pt	..	..
Centre of Social Medicine and Community Health **School of Social Sciences** **Jawaharlal Nehru University** **Block III, NAA Campus** **NEW DELHI 110067**	1971	5 ft	N: 3 m	N: 3 m

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
DELHI (*continued*)				
Maulana Azad Medical College University of Delhi NEW DELHI	1969	18 ft	N: 4 m	N: 2 m
National Institute of Health and Family Welfare (G)[a] New Mehrauli Road Munirka NEW DELHI 110067	1969	31 ft	N: 11 (9 m; 2 f)	N: 11 (9 m; 2 f)
Department of Preventive and Social Medicine (G, I, S) Lady Hardinge Medical College University of Delhi NEW DELHI 110001	1968	12 ft	N: 2 m	N: 2 m
GOA, DAMAN AND DIU				
Goa Medical College (S) University of Bombay PANAJI 403001	1980	5 ft	N: 3 (2 m; 1 f)	N: 3 (2 m; 1 f)
GUJARAT				
Department of Preventive and Social Medicine[a] B.J. Medical College Gujarat University AHMEDABAD 380016	1966	8 ft	N: 5 (4 m; 1 f)	N: 5 (4 m; 1 f)
Department of Preventive and Social Medicine[a] Smt. N.H.L. Municipal Medical College Gujarat University Ellisbridge AHMEDABAD 380006	1976	4 ft 2 pt	N: 1 m	N: 1 m
Department of Community Medicine (G) Medical College Maharaja Sayajirao University of Baroda BARODA 390001	1966	8 ft 1 ft	N: 315 (310 m; 5 f)	N: 5 (4 m; 1 f)
Department of Community Medicine[b] Government Medical College South Gujarat University Outside Majura Gate SURAT 395001	1975	9 ft	N: 5 (4 m; 1 f)	N: 5 (4 m; 1 f)
KARNATAKA				
Bangalore Medical College Bangalore University Fort BANGALORE 560001	1976	7 ft	N: 12 (10 m; 2 f)	N: 7 (5 m; 2 f)

Name and address	Year public health course started	Academic year 1979–1980		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)
KERALA				
Department of Social and Preventive Medicine (G, I, S)[a] **Trivandrum Medical College** **University of Kerala** **TRIVANDRUM 11**	1962	21 ft 4 pt	N: 95	N: 15
MAHARASHTRA				
Department of Preventive and Social Medicine[a] **Medical College** **Marathwada University** **AURANGABAD 431001**	1967	14 ft	N: 9 m	N: 9 m
Department of Preventive and Social Medicine (G)[a] **Grant Medical College** **University of Bombay** **Byculla** **BOMBAY 400008**	1915	12 ft	N: 11 (8 m; 3 f)	N:11 (8 m; 3 f)
Department of Preventive and Social Medicine (G, I, S) **Seth G.S. Medical College and K.E.M. Hospital** **University of Bombay** **Acharya Donde Marg, Parel** **BOMBAY 400012**	1960	9 ft 1 pt	N: 9 (6 m; 3 f)	N: 9 (6 m; 3 f)
Department of Preventive and Social Medicine[a] **Topiwala National Medical College and B.Y.L. Nair Charitable Hospital** **University of Bombay** **Dr A.L. Nair Road** **Byculla** **BOMBAY 400008**	1939	11 ft 4 pt	N: 213 (161 m; 52 f)	N: 11 (8 m; 3 f)
Department of Preventive and Social Medicine[a] **Government Medical College** **University of Nagpur** **NAGPUR**	1960	18 ft	N: 21 (16 m; 5 f)	N: 21 (16 m; 5 f)
Department of Preventive and Social Medicine (G, I, S) **Armed Forces Medical College** **University of Pune** **PUNE 411001**	1959	14 ft	N: 13 m	N: 13 m
Department of Preventive and Social Medicine[a] **Dr Vaishampayan Memorial Medical College** **Shivaji University** **SHOLAPUR 413003**	1976	12 ft	N: 8 (3 m; 5 f)	N: 8 (3 m; 5 f)

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
ORISSA				
Department of Preventive and Social Medicine M.K.C.G. Medical College Berhampur University BERHAMPUR 760004	1972	6 ft	N: 3 m	—
V.S.S. Medical College Sambalpur University Burla SAMBALPUR 768017	1970	8 ft	N: 5 (4 m; 1 f)	N: 5 (4 m; 1 f)
PUNJAB				
Department of Community Medicine (G, I, S) Government Medical College Guru Nanak Dev University AMRITSAR	1967	6 ft	N: 8 m	N: 8 m
RAJASTHAN				
Department of Preventive and Social Medicine (G)[a] Sardar Patel Medical College University of Rajasthan BIKANER	. .	15 ft	N: 2 (1 m; 1 f)	N: 2 (1 m; 1 f)
Department of Preventive and Social Medicine Swai Mensingh Medical College University of Rajasthan JAIPUR	1964	15 ft 20 pt	N: 9	N: 9
Department of Community Medicine R.N.T. Medical College University of Rajasthan UDAIPUR 313001	1973	8 ft	N: 4 m	N: 4 m
TAMIL NADU AND PONDICHERRY				
Department of Community Medicine Jawaharlal Institute of Postgraduate Medical Education and Research University of Madras PONDICHERRY 605006	1979	11 ft	N: 2	N: 2
Department of Community Health (I) Christian Medical College University of Madras Bagayam VELLORE 632002	1973	7 ft 1 pt	N: 12 (8 m; 4 f)	N: 6 (4 m; 2 f)
UTTAR PRADESH				
Department of Preventive and Social Medicine[a] Jawaharlal Nehru Medical College Aligarh Muslim Univeristy ALIGARH 202001	1971	9 ft	N: 2 m	N: 2 m

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
UTTAR PRADESH (*continued*)				
Department of Social and Preventive Medicine **M.L.N. Medical College** **University of Allahabad** **ALLAHABAD**	1967	9 ft	N: 3 (1 m; 2 f)	N: 3 (1 m; 2 f)
Department of Social and Preventive Medicine **Ganesh Shanker Vidhyarthi Memorial Medical College** **Kanpur University** **KANPUR**	1977	15 ft	N: 8 (7 m; 1 f)	N: 5 m
Upgraded Department of Social and Preventive Medicine **K.G. Medical College** **University of Lucknow** **LUCKNOW 226003**	1963	24 ft 12 pt	N: 8 (7 m; 1 f)	N: 8 (7 m; 1 f)
WEST BENGAL				
All-India Institute of Hygiene and Public Health (G, I, S)[a] **110 Chittaranjan Avenue** **CALCUTTA 700073**	1932	94 ft	N: 223 (153 m; 70 f) F: 9 (8 m; 1 f)	N: 65 (63 m; 2 f)
School of Tropical Medicine **Chittaranjan Avenue** **CALCUTTA 700073**	1921	31 ft 4 pt	N: 87 (79 m; 8 f)	N: 8[c] (6 m; 2 f)

[a] 1982–1983 figures.
[b] 1981–1982 figures.
[c] Diploma in Tropical Medicine and Hygiene.

Indonesia

General information

In Indonesia, postgraduate training in public health is available at the Faculty of Public Health, University of Indonesia, Jakarta. The institution is part of the University of Indonesia and operates under the jurisdiction of the Ministry of Education and Culture. The Government provides its main financial support, supplemented by tuition fees and funds from international and private sources. The chief executive officer is the Dean, who is guided by the Faculty Senate.

In 1981 Airlangga University, Surabaya also opened a postgraduate programme in public health.

The academic year begins in August and ends in June. The language of instruction is Indonesian.

Courses offered

The following courses are organized:

- (1) Public Health Specialist;[1] students may specialize in:
  - (*a*) communicable disease control;
  - (*b*) public health education;
  - (*c*) environmental health;
  - (*d*) occupational health;
  - (*e*) health planning and management;
  - (*f*) family planning administration/population studies;
  - (*g*) hospital administration;
  - (*h*) health care services.
- (2) Master of Science in Public Health; students may specialize in:
  - (*a*) biostatistics;
  - (*b*) environmental health;
  - (*c*) occupational health;
  - (*d*) epidemiology.

Both courses last for 20 months (4 semesters).

An undergraduate course, also of 20 months' (4 semesters) duration, is open to bachelors of science who have graduated from the 3-year academy programme of the Ministry of Health in nutrition, nursing, or environmental health; it leads to a *Sarjana Kesehatan* (Bachelor of Health Sciences) degree. Students may specialize in:

- (*a*) community health nursing;
- (*b*) public health nutrition;
- (*c*) environmental health;
- (*d*) communicable disease control;
- (*e*) public health education;
- (*f*) family planning/population studies.

Conditions of admission

Applicants for the postgraduate courses must hold a university degree in medicine, dentistry, veterinary medicine, pharmacy, or sanitary engineering at the *sarjana* or *doctorandus* level, and have acquired at least 3 years' experience in the field of public health. They must also be recommended by the institution that employs them. There is no entrance examination, no language proficiency examination, and no age limit, but applicants must be medically fit and may have to undergo a physical examination. In selecting applications their academic records and previous work experience are taken into account.

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[1] Equivalent to the degree of Master of Public Health.

Tuition fees are charged. In the academic year 1979–1980 the fee for the Public Health Specialist programme was Rp. 2490000, for the Master of Science in Public Health programme Rp. 3290000, and for the *Sarjana Kesehatan* programme Rp. 2240000. No training grants are provided by the University.

Curriculum

A curriculum committee is composed of the Associate Dean for Academic Affairs and the academic programme coordinators of the University of Indonesia, the Dean of the School of Public Health, and the chairman of each department contributing to the public health programme. Agencies involved in health care delivery (the Ministry of Health and the National Family Planning Coordinating Board) are consulted when the curricula are being revised in order to ensure that they are relevant to the health problems of the community.

Students in the 3 programmes follow core courses, with further obligatory subjects and some electives in subjects related to the field in which they wish to specialize. The number of hours of formal instruction for the Public Health Specialist programme amounts to 1035.

Lectures, discussions on individual or group reports, and field visits are the main methods of instruction. Problem-solving exercises are used in some courses. The institution has no field training areas under its direct control but makes arrangements with urban and rural health centres and community development field training areas for the practical training of its students.

The management of health services based on primary health care is taught as part of public health administration and health education.

Assessment of students

During all the courses assessment keeps the students informed of their progress; this takes the form of mid-term examinations, individual and group assignment reports, and advice on field work and research.

The final examinations are conducted by the staff of the department concerned, and include questions contributed by each faculty member teaching in the course. Final grades are based on the written examinations, individual/group assignment reports, and a thesis. The thesis is examined by a committee, the members of which include 2 external examiners. The completion of field work and assignments, a satisfactory record of attendance, and success in the intermediate examinations are also requirements for the award of the degree.

Qualification

After having completed the course (including the field work), succeeded in the final examination, and had his thesis accepted, a candidate is awarded the degree of Public Health Specialist or Master of Science in Public Health. In Indonesia, a graduate (*sarjana*) and postgraduate qualification in public health entitles its holder to a minimum salary scale in government service at national, provincial, regional, or sub-regional levels.

Name and address	*Year public health course started*	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Fakultas Kesehatan Masyarakat (G, S) **(Faculty of Public Health)** **University of Indonesia** **Jalan Proklamasi 16** **JAKARTA**	1965	47 ft 76 pt	N: 138 (101 m; 37 f)	63

Islamic Republic of Iran

General information

In the Islamic Republic of Iran, postgraduate training in public health is available at the School of Public Health, University of Teheran, which is part of the University, a state institution operating under the general supervision of the Ministry of Science and Higher Education, deriving most of its funds from government subsidy. The chief executive officer is the Dean. The School is administered by a council, composed of representatives of the faculty, the students, and non-academic employees. It incorporates the Institute of Public Health Research, which was established in 1952 in cooperation with the Ministry of Health.

Collaboration exists with all the faculties and research and academic institutions within the University of Teheran, with research institutions outside the University, and with those ministries (for instance, the Ministry of Health) and other governmental agencies that benefit, in one way or another, from the training and research activities of the institution.

The purpose of the institution is to provide training for those who wish to become specialists in public health or to serve as general public health workers in the field. In addition, it is responsible for training students from the School of Medicine and other schools of the University in all aspects of public health. It engages extensively in research and in services to the community.

The academic year begins in September and ends in June. The language of instruction is Persian; however, the programme leading to the degree of

Master of Science in Public Health and all international or regional courses, including the international course leading to the degree of Master of Public Health, are held in English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course normally lasts for 1 year and may not be extended beyond 3 years.

(2) Master of Science in Public Health (M.S.P.H.); a 2-year course with emphasis on the following:

- (*a*) hospital administration;
- (*b*) environmental health;
- (*c*) health education;
- (*d*) medical entomology and vector control;
- (*e*) public health nutrition;
- (*f*) biostatistics;
- (*g*) pathobiology;
- (*h*) radiation protection;
- (*i*) occupational health;
- (*j*) immunobiology.

(3) A doctorate programme (Ph.D.) in medical entomology and parasitology. This is an advanced graduate degree course and is open to holders of a master's degree in a related field who intend to pursue research or teaching careers. Because of the nature of the programme and the fact that a thesis must be presented no specific duration has been established.

(4) Specialization in Public Health in one of the following areas:

- (*a*) public health administration;
- (*b*) epidemiology;
- (*c*) biostatistics;
- (*d*) pathobiology (specifically in parasitology, mycology, bacteriology, virology, and immunology);
- (*e*) occupational health;
- (*f*) maternal and child health;
- (*g*) family planning;
- (*h*) environmental health.

This course lasts for a minimum of 3 years, 1 year being for the M.P.H. course, followed by a minimum of 2 years devoted to a residency programme in a laboratory, health centre, field station, or other unit, as approved by the institution.

Other training programmes relate to the teaching of students from the Schools of Medicine, Pharmacy, Dentistry, Agriculture, Forestry, Education, Engineering, and Nursing and Midwifery of the University of Teheran, as well as from institutions outside the University. Short courses for the training of government employees are also held.

International or regional courses are held at the request of international organizations. To date, in collaboration with the World Health Organization, an 18-month programme for international students, leading to the degree of Master of Public Health, has been held twice and courses have been organized in the following subjects:

(*a*) the epidemiology and control of diarrhoeal diseases;
(*b*) measurement techniques in health education;
(*c*) health and manpower planning (held twice);
(*d*) the epidemiology and control of malaria;
(*e*) malaria entomology (senior course);
(*f*) malaria entomology (junior course);
(*g*) immunology;
(*h*) the virology and diagnostic techniques of influenza.

Conditions of admission

The minimum requirement for admission to the M.P.H. programme is the possession of a basic degree or diploma in medicine, veterinary medicine, pharmacy, or dentistry, with a minimum of 2 years' field experience. Applicants should not normally be older than 40 years; above that age only specially well-qualified applicants are admitted. All applicants must pass an entrance examination and attend a personal interview. They must also undergo a medical examination and be proficient in the course language of instruction. Applicants who have experience in research, have published papers, or are sponsored by government or academic bodies are given preference.

National students are not charged tuition fees, but are required to work for the Government for a length of time equal to that spent in study. Foreign students are eligible for enrolment in both the national and international programmes provided they are proficient in the language of instruction. In the academic year 1979–1980 the tuition fee for foreign students was Rls. 6000 a semester. The fee is subject to change without notice.

Curriculum

A curriculum committee is composed of the Assistant Dean for Educational Planning, the directors of each of the various degree programmes (12 faculty members), representatives of the student body of each programme, and a representative of the technical employees. Independent research studies carried out under the auspices of the institution, evaluation reports on the health problems of the community, and consultation with representatives of the Ministry of Health ensure that the curricula are relevant to the health needs of the community.

In the M.P.H. programme the student follows a basic public health core course during the first semester, after which he selects additional subjects on which to concentrate under the direction of his adviser, according to his qualifications, record, experience, and interests and on the recommendation of the agency sponsoring him.

The total number of credit units required is 32 (about 700 hours), of which 12 (208 hours) must be from the basic compulsory core subjects. The remaining credit units (4 in the first semester and 16 in the second) are obtained from the elective subjects. During the course, students visit major health institutions to become familiar with national programmes and administrative organization at rural, district, provincial, and central levels (depending on their former experience and academic background).

Lectures, field visits, and field practice are the most important methods of instruction, as well as laboratory work, seminars, and problem-solving activities. All students must present a thesis. Field work (practical training of 3 months' duration) must be accomplished satisfactorily but is not credited. Field work may be carried out at the various laboratories of the School of Public Health and Institute of Public Health Research, and at health centres, research stations, or other institutions recognized by the University. There are 9 field stations directly related to the School and the Institute.

The management of health services based on primary health care is taught in the Master of Public Health and the Master of Science in Public Health courses.

Assessment of students

During some of the courses the students are provided with information on their progress. The final examinations consist of written, oral, and practical tests, including problem-solving exercises, and are conducted by a board of internal and external examiners. Students must pass the intermediate examinations and are examined on their theses.

Qualification

After having passed the requisite examinations, carried out field work, and presented a thesis and defended it satisfactorily, candidates are awarded the degree of Master of Public Health or Master of Science in Public Health.

In the Islamic Republic of Iran, a Master of Public Health degree is at present a requirement for employment in the posts of division chief in the Ministry of Health or director-general of a provincial health department; in the future it will also be necessary for appointment as chief of a district health department or chief of a first-grade health centre.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No of students in the basic public health degree/diploma course*
School of Public Health and Institute of Public Health Research (G, I, S) University of Teheran P. O. Box 1310 TEHERAN	1966	89 ft	N: 237 (173 m; 64 f)	N: 21 (19 m; 2 f)

Ireland

General information

In Ireland, postgraduate training in public health is available at the Department of Community Medicine and Epidemiology, Faculty of Medicine, University College, Dublin, which is a constituent college of the National University of Ireland. The College is financed by substantial government grants supplemented by local authority grants and student fees. The Faculty of Medicine is headed by a dean, and the Department of Community Medicine and Epidemiology by a professor.

Education in public health (community medicine, epidemiology, and preventive medicine) is offered at undergraduate and postgraduate levels. Other departments of the University and Faculty—for example, microbiology, business administration, psychology, and social science—contribute to the teaching.

The academic year begins in October and ends in June. The language of instruction is English.

Courses offered

The following course is organized provided at least 12 suitable applications are received:

Diploma in Public Health (D.P.H.); the course lasts for 1 academic year full time.

Conditions of admission

Applicants for the course must hold a basic medical degree and must have been fully registered for at least 2 years before they are permitted to present themselves for the D.P.H. examination. There is no entrance or medical examination, or an age limit for admission. Foreign students are eligible for enrolment; those whose mother tongue is not English must take a language proficiency examination.

Tuition fees are charged; for the academic year 1982–1983 the fee for students resident in Ireland or other countries of the European Economic Community was IR £ 859 and for other students IR £ 1718. No training grants are provided by the institution.

Curriculum

A curriculum committee is composed of the full-time staff of the Department of Community Medicine and Epidemiology. All the subjects studied are compulsory, with a total of 388 hours of instruction.

Tutorials, seminars, workshops, and problem-solving activities are the predominant methods of instruction. Lectures and field practice are also used. The institution has no field training areas under its direct control but makes arrangements with urban and rural health centres and community development field training areas, as necessary, for the practical training of its students.

Assessment of students

Students are assessed regularly to provide them with information on their progress.

To be admitted to the final examination candidates must have completed the courses of instruction to the satisfaction of the University authorities. Methods of assessment include the observation of students in class, projects, and problem-solving exercises. The final examination includes written and oral tests in the subjects of the curriculum, and is conducted by a board of internal and external examiners. Students must pass all the tests at one session. A satisfactory dissertation on an allotted subject is required.

Qualification

After having succeeded in the examination and had his dissertation accepted, a candidate is awarded the Diploma in Public Health. In Ireland, this qualification is a requirement for employment in the posts of director of community care, medical officer of health, or senior area medical officer.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Community Medicine and Epidemiology Faculty of Medicine University College Earlsfort Terrace DUBLIN 2	1908	5 ft 20 pt	N: 16 (6 m; 10 f) F: 2 m	N: 16 (6 m; 10 f) F: 2 m

Israel

General information

In Israel, postgraduate training in public health is available at the Hadassah School of Public Health and Community Medicine, which is part of the Faculty of Medicine, Hebrew University, Jerusalem. The University is an independent institution within which the teaching of the health sciences has been developed through a faculty of medicine composed of the Hadassah Medical School, including the Schools of Pharmacy, Nursing, Public Health and Community Medicine, and Occupational Therapy and the Institutes of Metabiology and Biochemistry, and a faculty of dentistry. The chief executive officer of the School of Public Health and Community Medicine is the Director.

The School of Public Health and Community Medicine is organized in a number of specialized departments, namely: social medicine, medical ecology, environmental health, occupational health, and nutrition. The responsibility for teaching community medicine, health education, and maternal and child health falls to the Department of Social Medicine. These departments, together with other departments of the Medical School and the University, are responsible for implementing the curriculum of studies.

The institution is financed by the Government, the Hadassah Medical Organization, which is a voluntary nongovernmental institution, and the University.

The academic year begins in October and ends in June.

Courses offered

The following courses are organized:

(1) Master of Public Health of the Hebrew University; the course lasts for 2 years. Students must present a dissertation within a year of completing the course. The language of instruction is Hebrew but most of the reading material is in English.

(2) Master of Public Health; a special international course in public health and community medicine. The course lasts for 14 months of full-time study, during which a dissertation must be completed. The language of instruction is English.

In addition, the institution provides facilities for students to carry out doctoral research in community medicine or public health. A postgraduate nursing seminar is also conducted.

Conditions of admission

Applicants for the M.P.H. courses must be university graduates or hold an equivalent diploma, with professional experience in practice, research, or teaching in public health or a related field. The courses are not exclusively designed for physicians; they have always included other professional public health personnel, such as veterinarians, dentists, suitably qualified nurses and social workers, social scientists, statisticians, and health educators. There is no age limit for admission to either course. Foreign students are admitted to the international Master of Public Health course but must pass a medical examination and a language proficiency test.

Tuition fees are charged. In the academic year 1980–1981 the fee for national students was Shek. 5600. The institution provides a number of training grants.

Curriculum

Responsibility for the curricula is vested in a curriculum committee composed of members of the staff of the School of Public Health and Community Medicine who teach in the Master of Public Health course. The Medical School has also instituted a special committee for advanced studies, on which are represented various groups conducting postgraduate studies other than those included in the regular medical curriculum. The curriculum for the Master of Public Health course is discussed by this body, which is generally responsible for the promotion of studies and for establishing policy with regard to admissions, examinations, etc.

The Master of Public Health course includes obligatory subjects and elective subjects chosen from a specified list. The total number of hours of instruction is 765. Under special circumstances alternative subjects may be selected if they are consistent with the student's main field of interest and are recognized for credit purposes by the University authorities.

Lectures, seminars, workshops, and field practice are the main methods of instruction. Problem-solving activities and field visits are used to a lesser extent, and self-instructional material is used a little. The institution has an urban health centre under its direct control. It also makes arrangements with other urban and rural health centres and community development field training areas for the practical training of its students.

Assessment of students

During some of the courses of instruction students are regularly informed of their progress.

The final examination is conducted by a board of examiners and consists of written, oral, and practical tests. Methods of assessment include the observation of students in class, problem-solving exercises, and projects. Success in the intermediate examinations and a satisfactory record of attendance are required. In addition, students must prepare dissertations which should demonstrate their ability to carry out scientific studies in areas of significance in community medicine and public health.

Qualification

After having completed the course and the requisite field work, passed the necessary examinations, and submitted a satisfactory dissertation, a candidate is awarded the degree of Master of Public Health of the Hebrew University.

Name and address	*Year public health course started*	*Academic year 1980–1981*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Hadassah School of Public Health and Community Medicine **Faculty of Medicine** **Hebrew University** **P.O. Box 1172** **JERUSALEM 91000**	1960[a]	23 ft	. .	45[a]
	1970[b]	11 pt		25[b]

[a] Regular course.
[b] International course.

Italy

General information

In Italy, postgraduate training in public health for physicians is available at 22 institutions. All the training institutions function within institutes of hygiene which are attached to university medical faculties. The universities in Italy are owned and financed by the State and operate under the jurisdiction of the Ministry of Education.

At the head of each institution is a director, who is also director of the institute of hygiene concerned.

The academic year begins in November and ends in June or July. The language of instruction is Italian.

Courses offered

The following course is organized at each institution:

Diploma in Hygiene and Preventive Medicine (*Specializzazione in Igiene e Medicina Preventiva*) which may be obtained in the following fields:

(*a*) public health (health services);
(*b*) laboratory methods and practice;
(*c*) occupational health;
(*d*) school health;
(*e*) hygiene and hospital techniques.

Until the end of the academic year 1979–1980, the course extended over 3 years of part-time study; since then, it has been revised to last for 4 years of part-time study.

Conditions of admission

Only graduates in medicine are eligible for enrolment. The maximum number of admissions is established by law for each institution, depending on its facilities. There is an entrance examination, but no medical examination, and no age limit for admission. Foreign students are admitted; they may be required to demonstrate their knowledge of Italian. Tuition fees are charged; for the academic year 1979–1980 they varied from Lit. 165 000 to Lit. 600 000.

Curriculum

The curriculum of studies is established by a national committee, the *Consiglio della scuola*, consisting of the directors of all the institutions, under the auspices of the Ministry of Education. The curriculum is fixed by law, and is similar at all the institutions. Core subjects are taught during the first 2 years, after which students specialize in one of the 5 subjects mentioned above for the remaining 2 years. The total number of hours of instruction varies between 500 and 600, depending on the subject chosen.

Instruction is in the form of lectures, seminars, field work, visits, and practical work. Practical training arrangements are made with various municipal and provincial health services, with institutes and laboratories, and with the respective university's medical services. Attendance at courses of instruction and practical work is compulsory.

The management of health services based on primary health care is taught during the third or fourth years as part of health economics and community medicine.

Assessment of students

At a few of the institutions the courses of instruction in some of the subjects allow for the students to receive information on their progress. At some, methods of assessment include the observation of students in class, in the field, and during their practical work.

The examinations are oral and, in some cases, also written. Students must pass examinations in the subjects required in each year before admission to the following year of the course. After the final examination, which is conducted by members of the teaching staff and, in some cases, also by external examiners, each student must present and defend a thesis.

Qualification

After having completed the course, succeeded in the examinations, and presented a thesis and defended it satisfactorily, a candidate is awarded the diploma of *Specializzazione in Igiene e Medicina Preventiva*. This qualification is a requirement for some public health service appointments, and candidates for certain other posts who possess it are given preference in the selection process.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Scuola di Specializzazione in Igiene e Medicina Preventiva (G, S) Istituto d'Igiene Università di Bari 70124 BARI	1930	12 pt	N: 80 (60 m; 20 f)	N: 80 (60 m; 20 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva[a] Istituto d'Igiene Università di Bologna BOLOGNA	1932	30	176	176
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Cagliari Via G.T. Porcell 09100 CAGLIARI	1960	. .	N: 45	N: 45
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Catania Via Biblioteca 4 95124 CATANIA	1970	8 ft 26 pt	N: 100 (66 m; 34 f)	N: 100 (66 m; 34 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva (G) Istituto d'Igiene Università di Ferrara Via Fossato di Mortara 64 44100 FERRARA	1971	25 pt	N: 73 (53 m; 20 f)	N: 73 (53 m; 20 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Firenze Viale Morgagni 48 FIRENZE	1950	28 pt	N: 45 (25 m, 20 f)	N: 45 (25 m; 20 f)

Name and address	Year public health course started	Academic year 1979–1980		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Genova Via Pastore 1 16132 GENOVA	1969	32 pt	N: 118 (83 m; 35 f)	N: 118 (83 m; 35 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Messina Via Tommaso Cannizzaro 278 98100 MESSINA	1968	..	..	..
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Milano Via F. Sforza 35 MILANO	1948	30 pt	N: 176 (120 m; 56 f)	N: 176 (120 m; 56 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Modena Via G. Campi 287 41100 MODENA	1970	42	..	N: 80
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Napoli NAPOLI	1968	..	..	..
Scuola di Specializzazione in Igiene e Medicina Preventiva (G) Istituto d'Igiene Università di Padova Via Loredan 18 35100 PADOVA	1968	11 ft 42 pt	N: 120	N: 120
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Palermo Via del Vespro 133 PALERMO	1946	26 pt	N: 89 (73 m; 16 f)	N: 89 (73 m; 16 f)
Centro di Virologia Istituto d'Igiene Università di Parma Via Gramsci 14 PARMA	1970	5 ft 13 pt	N: 135 (102 m; 33 f) F: 4 m	N: 30 (20 m; 10 f) F: 2 m
Scuola di Specializzazione in Igiene e Medicina Preventiva Istituto d'Igiene Università di Pavia PAVIA	1969	..	..	..

Name and address	Year public health course started	Academic year 1979–1980		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Perugia** **Via del Giochetto** **PERUGIA**	1955	30 pt	N: 65 (42 m; 23 f)	N: 65 (42 m; 23 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Pisa** **Via San Zeno 35** **56100 PISA**	1970	12 pt	N: 30 (18 m; 12 f)	N: 30 (18 m; 12 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Roma** **Piazzale Aldo Moro 5** **ROMA**	1968	64 pt	N: 225 (152 m; 73 f)	N: 225 (152 m; 73 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva **Università Cattolica del Sacro Cuore di Milano** **ROMA**	1972	. .	. .	. .
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Sassari** **Via P. Manzella 4** **07100 SASSARI** **Sardinia**	1969	40 pt	N: 15 (9 m; 6 f)	N: 15 (9 m; 6 f)
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Siena** **SIENA**	1970	. .	. .	. .
Scuola di Specializzazione in Igiene e Medicina Preventiva **Istituto d'Igiene** **Università di Torino** **Via Santena 5 bis** **10126 TORINO**	1974	39 pt	N: 60 (50 m; 10 f)	N: 60 (50 m; 10 f)

[a] 1980–1981 figures.

Japan

General information

In Japan, postgraduate training in public health is available at the National Institute of Public Health, Tokyo. The Institute is a self-governing body, under the jurisdiction of the Ministry of Health and Welfare, financed by the Government. Its chief executive officer is the Director General.

The purpose of the Institute is to train public health personnel and to carry out research in public health. To meet that purpose it possesses certain facilities, including a radiation health laboratory, a gnotobiotics research laboratory, and an extensive library. It publishes a quarterly journal—the *Bulletin of the Institute of Public Health*.

The academic year begins in April and ends in March. The language of instruction is Japanese. However, students following the Dr P.H. course are permitted to study in English.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.); the course lasts for 1 year.

(2) Master of Public Health (M.P.H.); the course lasts for 2 years.

(3) Doctor of Public Health (Dr P.H.); the course lasts for 3 years.

In addition, numerous continuing education courses in the field of public health are offered in subjects such as environmental health, food hygiene, health education, and public health nursing. These courses, which are generally of 1 month's duration, are intended to provide those already working in the public health services with further training in their fields, particularly as regards recent developments in knowledge and techniques.

Conditions of admission

Applicants for all postgraduate degree courses must hold a degree or diploma in the health or a related field and must possess a national licence in that field. Applicants must pass written, language proficiency, and medical examinations and undergo a personal interview. There is no age limit for admission. Foreign students are admitted but must be recommended by their national governments and their applications must be approved by the Ministry of Health and Welfare of Japan.

No tuition fees are charged but students from private enterprise are expected to bear the costs of teaching materials, laboratory exercises, and field observation trips. A limited number of scholarships, available only for Japanese students, are granted annually according to the qualifications and financial needs of the applicants.

Curriculum

A curriculum committee is composed of the Director General of the Institute, the Vice-Director General, and members of the staff directly responsible for the training. Laboratory work, seminars, and field assignments are arranged in accordance with the future tasks of the students.

Applicants for the D.P.H. course may specialize in environmental science, public health nursing, or health science. They are selected accordingly, and must study certain compulsory subjects in their areas of specialization in addition to the basic core curriculum and elective subjects. The number of hours of formal instruction varies according to the area of specialization but the minimum is 330, excluding special individual assignments.

Lectures, seminars, workshops, problem-solving exercises, and field practice are the main methods of instruction. In addition to field work in certain subjects, students from different professional backgrounds take part in group field work, for which they form teams to analyse public health problems in connection with a topic suggested by the teaching staff of the Institute and to write a joint report. In addition, each student is required to select a research theme on which to write a dissertation.

The Institute has no health centre or field training area under its direct authority but makes arrangements with urban and rural health centres for the training of its students.

The management of health services based on primary health care is taught during the Master of Public Health course.

Assessment of students

During some of the courses students are provided with information on their progress. The final examinations consist of written and practical tests and are conducted by members of the teaching staff. The report of the group field work team of which the student was a member and his dissertation are also evaluated.

Qualification

After having attended the necessary courses of instruction for the specified lengths of time and acquired a minimum of 27 credits, satisfactorily performed the necessary field work, and passed the examinations, candidates are awarded the Diploma in Public Health. Though possession of this qualification is not obligatory, priority is given to holders of a degree or diploma in public health for promotion to the post of health centre director.

Name and address	*Year public health course started*	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
National Institute of Public Health 6-1, 4 chome Shirokanedai Minato-ku TOKYO 108	1939	133 ft	N : 374[a] (241 m; 133 f)	N : 33 (7 m; 26 f)

[a] Including students in continuing education courses in public health.

Lebanon

General information

In the Lebanon, postgraduate training in public health is available at the School of Public Health, Beirut, which is part of the American University of Beirut, a private institution. The University is an autonomous corporation chartered by the New York State Board of Regents and supported by voluntary private contributions, grants, tuition fees, etc. The school is headed by a dean.

The purpose of the school is to provide the most appropriate education and training for the promotion of health programmes in the countries of the area.

The academic year begins in October and ends in June. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 1–2 academic years, depending on the qualifications of the student and the programme followed.

(2) Master of Science (M.Sc.) in Epidemiology.

(3) Bachelor of Science (B.Sc.) in Environmental Health.

(4) Bachelor of Science (B.Sc.) in Medical Laboratory Techniques.

(5) Bachelor of Science (B.Sc.) in Biostatistics.

(6) Diploma in Laboratory Technology.

The following paragraphs relate mainly to the Master of Public Health course.

Conditions of admission

Applicants seeking admission to the 1-year M.P.H. course must have a basic degree in medicine and at least 3 years' experience in the health field. Applicants with a B.Sc. degree, preferably in a health-related field, and less than 3 years' experience may be admitted to the 2-year M.P.H. course. Applicants must undergo a medical examination and take a language proficiency test in English. There is no age limit for admission. Foreign students are eligible for enrolment.

Tuition fees are charged; for the academic year 1981–1982 the fee for the M.P.H. and the M.Sc. course was L.£ 12 340. Fees for other courses vary in amount. A number of fellowships are available from the University and other sources.

Curriculum

The curriculum for the M.P.H. course is designed and revised by the Academic Committee, which comprises the Dean and the heads of the Departments of Health Services Administration, Environmental Health, and Epidemiology and Biostatistics. The curriculum is composed of both obligatory and elective subjects.

Students who have a degree in medicine study their subjects for 1 academic year (9 months) full time, or for a period not exceeding 3 academic years part time. They must acquire 33 credit units.[a] Students with a B.Sc. follow a 2-year course which includes two periods of practical work totalling 26 weeks. They must acquire 60 credit units, 18 from core subjects. To obtain the remaining 42 credit units the students may choose between concentrating on health and hospital administration, epidemiology and biostatistics, or health behaviour and health education, or following a general public health programme.

Seminars, workshops, problem-solving exercises, field visits, and field practice are the commonest methods of instruction; lectures are also used. Numerous facilities for field practice exist in urban and rural health centres and community development field training areas under the School's control and outside it.

The management of health services based on primary health care is taught as part of health service administration.

Assessment of students

During all the courses assessment provides the students with information on their progress.

Methods of assessment include the observation of students in class and in the field, problem-solving and practical exercises, written and oral examinations, and written technical reports. The final examinations are conducted by a special examinations committee.

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[a] A credit unit represents 1 hour of class work a week for 1 semester of 16 weeks, or its equivalent in any other form of instruction.

Qualification

After having followed the necessary courses of instruction and obtained the required number of credit units, succeeded in the examinations, performed the necessary field work and other assignments, and presented satisfactory technical reports, candidates are awarded the degree of Master of Public Health. Possession of this degree is not at present a requirement for employment in any post in Lebanon.

Name and address	*Year public health course started*	*Academic year 1982–1983* *No. of teaching staff*	 *No. of students in all courses*	 *No. of students in the basic postgraduate public health degree/diploma course(s)*
School of Public Health (G, I, S) American University of Beirut P.O. Box 11-0-236 Bliss Street BEIRUT	1954	14 ft	203	69

Malaysia

General information

In Malaysia, postgraduate training in public health is available at the Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur which is headed by a professor. The institution comes under the jurisdiction of the Ministry of Education which finances it with assistance from private foundations and grants from public funds.

The academic year begins in September and ends in August. The language of instruction is English.

Courses offered

The following course is organized:

Master of Public Health (M.P.H.); the course lasts for 12 months.

Conditions of admission

The basic requirement for admission to the M.P.H. course is possession of an approved medical qualification (M.B.,B.S., M.D., or equivalent).

Applicants must also have had 2 years' general medical experience after internship, of which 1 year must have been spent in rural practice or its equivalent. There is no entrance examination, no age limit for admission, and no health or language proficiency requirement. Foreign students are admitted. The fee for all students was Ri. 1950 for the academic year 1980–1981.

Curriculum

A curriculum committee is composed of the Dean of the Faculty of Medicine, the professors of social and preventive medicine, parasitology, and psychological medicine, and a representative of the Ministry of Health. Evaluation of the curriculum by the curriculum committee and graduates of the course ensures that it is relevant to the tasks the graduates should be able to perform at the end of their studies.

Students may study general public health or specialize in one of the following areas: epidemiology and biostatistics, nutrition, family health, environmental and occupational health, or health planning and administration. The course comprises 600 hours of formal instruction, excluding 3 weeks spent on field visits.

Lectures, seminars, workshops, field visits, and field practice are the predominant methods of instruction; problem-solving is used to a lesser extent, and simulation occasionally. Students are required to spend some time in field research and to write a dissertation. The institution has a rural health centre and a community development field training area under its direct control, and arrangements also exist with other rural and urban health centres and community development field training areas for the training of its students. The management of health services based on primary health care is taught during the course.

Assessment of students

During the course formative assessment provides the students with information on their progress. Methods of assessment include field work and projects, written and oral examinations, and a dissertation. The student's attendance record and performance in an intermediate examination must be satisfactory. The final examination is conducted by a special committee the members of which include external examiners. A dissertation is obligatory.

Qualification

After having completed the course, including the field work, succeeded in the examinations, and presented a satisfactory dissertation, candidates are awarded the degree of Master of Public Health. In Malaysia, this degree is required for employment in the posts of public health officer, medical officer of health, and lecturer in community medicine.

Name and address	Year public health course started	Academic year 1980–1981		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course
Department of Social and Preventive Medicine (I, S) Faculty of Medicine University of Malaya Pantai Valley KUALA LUMPUR 22-11	1973	35 ft 19 pt	N: 6 m (4 m; 2 f)	N: 6 m (4 m; 2 f)

Mexico

General information

In Mexico, postgraduate training in public health is available at the School of Public Health, Mexico City. The School is a state-owned and state-financed institution under the Ministry of Health and Assistance, operating under the joint legal authority of that Ministry and the Ministry of Education. It is administered by the staff and is headed by a director. Its function is to provide training in public health for all categories of health personnel, to carry out research in public health, and to comply with requests for advice from public health institutions.

The academic year begins in February and ends in December. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (*Maestro en Salud Pública*).

(2) Master of Hospital Administration (*Maestro en Administración de Hospitales*).

(3) Master of Science (*Maestro en Ciencias*).

(4) *Enfermera en Salud Pública;* a diploma course for public health nurses.

(5) *Técnico en Saneamiento;* a certificate course for sanitarians.

The above-mentioned courses last for 10 months.

(6) Specialization courses (taken after the award of the degree of Master of Public Health or Master of Hospital Administration) in epidemiology, communicable diseases, public health nutrition, public health

administration, maternal and child health, and organization of medical care. The courses extend over 12 months and lead to the degree of *Especialista.*

Courses for physicians and nurses, leading to a certificate, are offered in health services administration, the planning and development of health services systems, and basic epidemiology. Courses for technicians are also given in basic public health statistics, environmental health promotion, and nutrition.

Conditions of admission

Applicants who seek admission to the M.P.H. course must: (1) hold a recognized degree in medicine, dentistry, veterinary science, or another discipline related to public health; (2) be proposed by an institution concerned with public health; (3) have had at least 2 years' experience in public health; (4) present a satisfactory health certificate; (5) pass a language proficiency examination; (6) be less than 45 years old.

Foreign students are eligible for enrolment. Tuition fees are charged; for the academic year 1979–1980 the fee for the M.P.H. course was Pesos 17 250 for national students and Pesos 23 000 for foreign students. The fees for other courses vary, depending on the level of the course and its duration.

Curriculum

A curriculum committee is composed of the Director and the heads of the teaching departments. The institution is very closely connected with the public health and social security services, acting as their advisory body; this ensures that the curricula relate to the tasks the students should be able to perform at the end of their studies.

The number of hours of instruction in the M.P.H. course totals 1600, most of the subjects being compulsory. Out of the 1600 hours, elective subjects occupy 80 hours of study.

Instruction is in the form of lectures, group discussions, seminars, problem-solving exercises, and laboratory and field work. The field work is carried out in urban and rural health centres administered by the national, state, provincial, or local public health services. Students also work in social security institutions and other public or private establishments, as well as in practical research activities.

Assessment of students

Methods of assessment include the observation of performance in class and in the field and how projects are carried out, and problem-solving exercises. A final examination is held in each subject studied and is written, oral, and practical. The examinations are administered by a board of internal and external examiners.

Qualification

To obtain the degree of Master of Public Health, candidates must have completed the course and all the necessary assignments, passed the intermediate and final examinations, and presented a thesis and defended it satisfactorily.

In Mexico, the following personnel must possess an M.P.H. degree: (1) senior administrative and technical personnel in the national, regional, and local public health services; (2) senior teaching and research staff at the School of Public Health and the departments of preventive medicine in university medical schools.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
Escuela de Salud Pública (G, I, S) Francisco de P. Miranda 177 Lomas de Plateros MÉXICO 19, D.F.	1922	31 ft	N : 307 (187 m; 120 f) F : 49 (45 m; 4 f)	N : 46 (38 m; 8 f) F : 20 (19 m; 1 f)

Netherlands

General information

In the Netherlands, postgraduate training in public health is available at 6 institutions. Three of these (at Amsterdam, Groningen, and Nijmegen) are institutes of social medicine attached to their respective universities and administered by their respective faculty boards. They are tax-supported and headed by a director, except for Nijmegen which is headed by a dean.

The Netherlands Institute for Preventive Health Care, Leiden, is a self-governing institution within the framework of the Organization for Applied Scientific Research, TNO (*Toegepast Natuurwetenschappelijk Onderzoek*). It is financed by health insurance funds and government grants. Most of the resources of the health insurance funds, which derive from employers and employees, are used for curative medicine, but a small proportion is deposited in the Prevention Fund, which makes a fixed sum available to the Institute yearly. This amount is supplemented by the Ministry of Welfare, Health and Cultural Affairs through the Organization for Applied Scientific Research. It is primarily a research institution, its main areas of concern being occupational health, child health, epidemiology, and mental health. Courses are organized by its department of training, and include postgraduate courses for physicians who wish to be registered as public health specialists. The costs of attending the public health courses are paid for mainly by the students or their employers. The Institute is headed by a director and the Department of Training by a head.

The Stichting Sociale Gezondheidszorg, Utrecht is a self-governing, private institution whose only source of income is tuition fees. It is headed by a director.

The Royal Tropical Institute, Amsterdam, an association with corporate status, is primarily concerned with gathering and disseminating scientific material on tropical and subtropical countries, mostly within the framework of development cooperation. Its department of tropical hygiene organizes an international course in health development jointly with the Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium,[1] in cooperation with the Institute of Tropical Medicine, Leiden/Rotterdam, the Netherlands Universities Foundation for International Cooperation (NUFFIC), and the Development Cooperation Agency (AGCD), Brussels. In the Netherlands the course is under the overall jurisdiction of the Ministry of Foreign Affairs, and the degree is awarded by NUFFIC. The course is headed by a course director and there is a council of coordination.

The academic year lasts from September to June or July at the Institute of Social Medicine and the Royal Tropical Institute, Amsterdam and the Institute of Social Medicine, Utrecht; and from January to November or December at the Institutes of Social Medicine, Groningen and Nijmegen, and the Netherlands Institute for Preventive Health Care, Leiden. The language of instruction is Dutch at all the institutions, except at the Royal Tropical Institute, where the International Course in Health Development is given in English.

Courses offered

The following courses are organized:

(1) Diploma in Social Medicine; various branches lead to this degree at all the institutions except the Royal Tropical Institute, Amsterdam:

(*a*) Integrated course on public health administration; the course lasts for 30 months of part-time study (500 hours of theory, 45 days of practical training, and 200 days working under supervision) and is offered at Leiden and Utrecht;

(*b*) Integrated course on occupational and industrial health; the course lasts for 30 months of part-time study (500 hours of theory, 60 days of practical training, and 200 days working under supervision) and is held at the Institute of Social Medicine, Amsterdam, Leiden, and Nijmegen;

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[1] See p. 23.

(*c*) Integrated course on child health; the course lasts for 30 months of part-time study (500 hours of theory, 60 days of practical training, and 200 days working under supervision) and is held at Leiden and Nijmegen;

(*d*) Integrated course on insurance medicine; the course lasts for 30 months (500 hours of theory, 60 days of practical training, and 200 days working under supervision) and is offered at Utrecht;

(*e*) At Groningen students belong to the scientific staff of the Institute of Social Medicine where they are employed as assistants to a professor of social medicine and public health. They follow a 3-year part-time programme of courses and private study (500 hours of theory and 70 days of practical training).

(2) International Course in Health Development; the course, leading to a Master of Public Health (M.P.H.) degree, lasts for 9 months and is given once every 2 years in English at the Department of Tropical Hygiene, Royal Tropical Institute, Amsterdam. It is also offered at the Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium in French in the year in which it is offered in English at Amsterdam, and in English in the intervening year.[1]

The Royal Tropical Institute, Amsterdam also offers the following courses:

(3) Certificate in Tropical Medicine and Hygiene; the course lasts for 3 months and is intended to prepare physicians for work in tropical countries.

(4) Preparatory course in tropical medicine for nurses and auxiliary health personnel; the course lasts for 3 weeks.

Conditions of admission

There is no age limit for admission to the courses in social medicine and neither an entrance nor a medical examination is required. The basic requirement for admission is a licence to practise medicine; graduates in other fields are admitted to the public health administration course. Foreign students are eligible for enrolment provided they are proficient in Dutch. Tuition fees are charged, except at Groningen, where the students are members of the staff of the Institute. In the academic year 1982–1983 the fee was Fls. 20000 for the total 2½-year course at the Institute of Social Medicine, Amsterdam, Leiden, and Utrecht; at Nijmegen the fee amounted to a total of Fls. 15000 for the 2½-year course.

The International Course in Health Development at the Royal Tropical Institute, Amsterdam is open to graduates in medicine with at least 4 years of experience in a developing country, holding managerial responsibility in a medical and health service. Applicants must be 30–45 years of age and are required to take a language proficiency test in English. Students sponsored by their governments are given special consideration for selection. Applicants from outside the European Economic Community (EEC) must provide a certificate of good health. A tuition fee is charged; for the academic year 1980–1981 it was 2150 Fls. Grants are provided by the governments of the Netherlands and other EEC countries and by some international agencies.

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[1] See p. 23.

Curriculum

At all the institutions that have courses leading to the Diploma in Social Medicine the curricula are approved by the national specialist registration board. All the subjects are compulsory, with a total of 500 hours of instruction. Instruction is in the form of lectures, seminars, demonstrations, and field trips. Some of the institutions use self-instructional materials and problem-solving exercises. For the practical training of the students, arrangements are made with the urban and rural health services, including the municipal, school, and occupational health services. The students prepare a thesis.

The International Course in Health Development provides health professionals from developing countries with the opportunity to develop their capabilities for assuming managerial functions within their national health systems. The course begins with an introduction to the disciplines, and training in the methodology relevant to the organization, operation, and evaluation of a health system, in the context of overall development. In the second half of the course the major health problems of a developing country are studied, drawing on the experience of the students themselves, who represent many different societies, health systems, and levels of responsibility. Each student designs and carries out a personal project, culminating in a thesis. All the subjects are compulsory, with a total of 556 hours of instruction, excluding the time spent on field visits.

Assessment of students

The examinations at the Royal Tropical Institute, Amsterdam, are oral and practical and are held before a board of internal and external examiners. A thesis must be presented. Formal examinations are not held at the other institutions but the performance of the student is evaluated during the course (using intermediate examinations at some of the institutions and the observation of work in class and in the field at others) and at the end of the course. A thesis must be presented and a satisfactory record of attendance is required.

Qualification

After having completed the course and presented a satisfactory thesis candidates receive the Diploma in Social Medicine.

A graduate of the course is eligible to have his name entered on the register of public health specialists—health administration branch, child health branch, or occupational health branch—provided he has worked for 2 years after having completed the course in a suitable post under supervision.

At the Royal Tropical Institute, Amsterdam, the degree of Master of Public Health is awarded to candidates who have successfully completed their studies. Those who do not meet the requirements receive a certificate of attendance.

In the Netherlands, only the head of the occupational health services is required by law to have a postgraduate qualification.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Koninklijk Instituut voor de Tropen[a] (Royal Tropical Institute) 63 Mauritskade 1092 AD AMSTERDAM	1964	8 pt	. .	N: 2 f F: 18 (15 m; 3 f)
Instituut voor Sociale Geneeskunde (G) Vrije Universiteit Van den Boechorststraat 7 AMSTERDAM-BUITENVELDERT	1960	4 ft 4 pt	N: 25 (14 m; 11 f)	N: 25 (14 m; 11 f)
Instituut voor Social-Medische Wetenschap der Rijksuniversiteit (G) Bloemsingel 1 9713 BZ GRONINGEN	1967	5 ft 4 pt	. .	N: 2 (1 m; 1 f)[b]
Nederlands Instituut voor Praeventieve Gezondheidszorg, TNO (G) Wassenaarseweg 56 2353 AL LEIDEN	1951	4 ft 150 pt	N: 48 (30 m; 18 f)	N: 18 (15 m; 3 f)
Vahgroep Sociale Geneeskunde (G) Katholieke Universiteit Verlengde Groenestraat 75 6525 EJ NIJMEGEN	1959	8	. .	N: 250 (160 m; 90 f)
Stichting Sociale Gezondheidszorg (G) Leidseweg 83 3531 BG UTRECHT	1960	4 ft	N: 97 (72 m; 25 f)	15[a]

[a] 1980–1981 figures.

[b] 1983 figures.

Nigeria

General information

In Nigeria, postgraduate training in public health is available at the Department of Preventive and Social Medicine, College of Medicine, University of Ibadan, and at the Department of Community Health, College of Medicine, University of Lagos. Both universities are autonomous institutions financed by the Federal Government of Nigeria. Both colleges of medicine are directed by a provost and both departments are headed by a professor. The academic year begins in October and ends in June.

Two other bodies grant postgraduate qualifications in public health and administer the relevant examinations: (1) the Nigerian Postgraduate Medical College, comprising several faculties of universities in Nigeria and financed by the Federal Government; and (2) the West African College of Physicians, comprising medical schools in Gambia, Ghana, Liberia, Nigeria, and Sierra Leone, the secretariat of which is in Yaba, Lagos.

The language of instruction is English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course, offered at both institutions, lasts for 21 months full time at Ibadan and 12 months at Lagos.

(2) Doctorate (Ph.D.); the course lasts for 24 months full time or 36 months part time and is offered at Ibadan.

(3) Fellowship in Community Health of the Nigerian Postgraduate Medical College; the programme, for physicians, lasts for 36 months full time and is offered at Ibadan.

(4) Courses to prepare candidates for the Primary and Part I examinations in public health of the West African College of Physicians.

Conditions of admission

Applicants for admission to the M.P.H. course at Ibadan must hold a bachelor's degree in medicine, the biological sciences, social science, or educational science. There is no entrance or language proficiency examination but applicants must satisfy health requirements. At Lagos applicants should be qualified medical practitioners fully registered with the Nigerian Medical Council. If they are Nigerians, they must have completed 1 year of National Youth Service and, in addition, have had at least 1 year's experience in any of the local government health services or in a comparable post. There is a facultative pre-test to determine which applicants are most suitable to benefit from the course. The number of students is at present limited to 15 a year. Foreign students are eligible for admission.

Tuition fees are charged. At Ibadan for the academic year 1979–1980 the fee for national students was Naira 330 and for foreign students Naira 1389. Tuition fees are not charged for the Fellowship in Community Health programme. No training grants are provided by the institution. At Lagos the tuition fee for the M.P.H. course was Naira 120 in the academic year 1981–1982.

Curriculum

At Ibadan a curriculum committee is composed of the Provost, the head of the Department of Preventive and Social Medicine, and other members of the academic staff of the College of Medicine. The curriculum of the M.P.H. course is composed of both obligatory and elective subjects, with a total of 656 hours of instruction. It places emphasis on field practice which extends throughout the course. Students undertake a period of resident field work in a selected area in one of several African countries, including Nigeria. The institution has urban and rural health centres and a community development field training area under its direct control. It also makes arrangements with other health centres and field training areas for the practical training of its students. In addition to field visits and field practice, problem-solving activities, seminars, and workshops are the main methods of instruction. Students also attend lectures, utilize self-instructional material, and learn through role-playing to a certain extent.

At Lagos all the subjects are compulsory, with a total of 862 hours of instruction by means of lectures, seminars, and laboratory work. Audiovisual techniques are also used. Field practice includes postings to the Medical Officers of Health for Lagos Island, Lagos Mainland, and Ikeja, and to a field malariology centre. Field visits are made to health centres, the Port health facilities, and other health and welfare establishments.

At Ibadan the management of health services based on primary health care is taught as part of community organization.

Assessment of students

At Lagos methods of assessment include in-course examinations held each semester and students are expected to present field visit case books at the end of their field visits. At Ibadan methods of assessment include the observation of the students in class and in the field, projects, and problem-solving exercises. The final examinations at both institutions are conducted by a special committee composed of internal and external examiners and consist of written, oral, and practical tests. A satisfactory record of attendance and success in the intermediate examinations are also required at Ibadan. Students at both institutions must present and defend a thesis.

Qualification

After having completed the course, carried out the necessary field work and other assignments, and presented a satisfactory thesis, candidates are awarded the degree of Master of Public Health. A postgraduate qualification in public health is required in Nigeria for employment in academic and public service posts in the Federal Ministry of Health, public health posts in local government agencies and some voluntary organizations, and teaching posts at universities and schools of health technology.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Preventive and Social Medicine (G) College of Medicine University of Ibadan IBADAN	1975	21 ft 3 pt	N: 23 (15 m; 8 f) F: 3 (1 m; 2 f)	N: 10 (8 m; 2 f) F: 2 (1 m; 1 f)
Department of Community Health[a] College of Medicine University of Lagos Private Mail Bag 12003 LAGOS	1980	6 ft 4 pt	. .	5 (2 m; 3 f)

[a] 1981–1982 figures.

Pakistan

General information

In Pakistan, postgraduate training in public health is available at the College of Community Medicine, Lahore. The College is affiliated to the Medical Faculty of the University of Punjab, which approves the courses of instruction and is the examining authority. The Pakistan Medical Council prescribes the qualifications of the teaching staff and lays down the standards of staffing and professional education. The Government of Punjab finances the College and exercises administrative control. It is directed by a principal.

The academic year begins in October and ends in July. The languages of instruction are English and Urdu.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.).

(2) Diploma in Maternal and Child Health (D.M.C.H.).

(3) Course for sanitary inspectors.

All three courses last for 1 academic year.

Training courses are also offered for other categories of health personnel, such as laboratory technicians, laboratory assistants, dental hygienists, dispensers, and dieticians. In-service training programmes and short-term courses in various aspects of public health are available for physicians and other members of the health team. A course in school health for teachers is organized jointly with the Department of Education.

Conditions of admission

Only medical graduates are admitted to the D.P.H. and D.M.C.H. courses. Applicants must have had at least 1 year of practical experience after graduation. There is no entrance examination, no language proficiency test, no health requirement, and no age limit for admission.

The students are mainly government medical officers but occasionally private medical practitioners seek admission. Tuition fees are charged; government candidates are exempted from payment. A hostel is available for students who are not resident in Lahore.

Curriculum

The curriculum is reviewed by a curriculum committee composed of the Principal, a representative of the Ministry of Health and Social Welfare, and all the professors of the College.

Students in the D.P.H. and D.M.C.H. courses study the same subjects, with greater emphasis placed on public health subjects in the former and on maternal and child health subjects in the latter.

All the subjects in the D.P.H. course are compulsory, with a total of 1081 hours of instruction. Lectures are the main method of instruction, together with seminars, workshops, and field visits. Role-playing, problem-solving activities, self-instructional material, and simulation are used a little. The College has urban and rural health centres and community field training areas under its direct control and also makes arrangements with other centres for the field training of its students.

The management of health services based on primary health care is taught as part of public health practice and administration.

Assessment of students

During both courses assessment provides the students with information on their progress.

The final examinations are conducted by internal and external examiners, and are written, oral, and practical. Satisfactory records of attendance and performance of field work are also required. Students in the D.P.H. course must, in addition, submit dissertations on public health problems.

Qualification

Having completed the course, including the field work and other assignments, and, in the case of D.P.H. students, presented an acceptable dissertation, candidates are awarded the Diploma in Public Health or the Diploma in Maternal and Child Health. In Pakistan, a postgraduate qualification in public health is a requirement for employment in administrative posts in the public health services, such as district health officer, medical superintendent of a hospital, or director of health services.

Name and address	Year public health course started	Academic year 1979–1980		
		No. of teaching staff	No. of students in all courses	No. of students in the basic public health degree/diploma course(s)
College of Community Medicine (G) 6 Birdwood Road LAHORE	1949	33 ft 35 pt	N: 269 (266 m; 3 f)	N: 17 (16 m; 1 f)

Peru

General information

In Peru, postgraduate training in public health is available at the School of Public Health, Lima. The institution is attached to the Ministry of Health and is financed through government subsidies. Its chief executive officer is a director general. Its functions are primarily to teach public health to physicians and other categories of health personnel.

The academic year begins in April and ends in March. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (*Maestria in Salud Pública*); the course lasts for 16 months.

(2) Basic Course in Public Health; the course lasts for 6 months.

(3) Course in Administration of Nursing Services; the course lasts for 2 months.

(4) Diploma in Public Health Nursing; the course lasts for 6 months.

(5) Certificate in Orientation in Public Health and Administration of Health Services; the course lasts for 6 weeks.

(6) Certificate in Orientation in Public Health for Midwives and Social Workers; the course lasts for 3 months.

(7) Course in Population Policy and Maternal and Child Health; the course lasts for 6 weeks.

(8) Certificate in Planning in the Health Sector; the course lasts for 4 months.

Conditions of admission

Applicants for the M.P.H. course must have a basic medical qualification or a degree in a health-related field awarded by a recognized university.

The students are chosen by the Selection Committee of the Ministry of Health. A health certificate is required. Foreign students are eligible for enrolment.

Tuition fees are charged, except to nationals of Peru employed by the Ministry of Health. In the year 1982 the fee for the complete M.P.H. course was S. 80000 for national students and US$2000 for foreign students. For each month of the other courses the fee was S. 6000 for national students and US$ 120 for foreign students. The Ministry of Health provides grants to those employees who normally reside outside Lima.

Curriculum

The Advisory Committee of the School is composed of the Director General, the Director (*Director Superior*) of the Ministry of Health, the Director General of Health Programmes, the Director General of the Sectoral Office of Health Planning, and representatives of the Ministry of Education and the National Board of the University of Peru.

The curriculum of the M.P.H. course is divided into 3 modules all of which contain compulsory subjects—public health in its context, specific health problems, and health administration. The number of hours of instruction amounts to 1660, excluding the time spent on field work.

The main methods of instruction are seminars, workshops, lectures, field visits, and practical exercises. Problem-solving and self-instructional materials are also used. The institution has no health centres under its direct control but, since it is attached directly to the Ministry of Health, students may carry out their field work in any part of the health services. At the end of the academic part of a course, the students spend 2 months doing field work outside Lima, during which they analyse the health situation of a particular community and formulate a plan of action for improving it. The plan of action outlines the necessary administrative strategies, taking into account the available resources. This ensures that the students are adequately prepared for the tasks they will be expected to accomplish during their employment after graduation.

The management of health services based on primary health care is taught in all the courses, at different levels, depending on the course.

Assessment of students

During all the courses assessment provides the students with information on their progress. Methods of assessment include the observation of students in class and in the field, problem-solving exercises, practical work, and written examinations. The students must also prepare dissertations on their field work. The final examinations are conducted by members of the teaching staff.

Qualification

After having attended all the courses of instruction, completed the field work and other assignments, succeeded in the examinations, and presented a dissertation and defended it satisfactorily, a candidate is awarded the degree of Master of Public Health. In Peru, this qualification is required for employment in senior administrative posts in the national and regional public health services, and senior public health teaching posts.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Escuela de Salud Publica (G, S) 3558 Avenida Brasil LIMA 17	1963	24 ft 83 pt	N: 390 F: 4	N: 24 m F: 4 m

Philippines

General information

In the Philippines, postgraduate training in public health is available at the Institute of Public Health, Manila. The Institute, which is administered by a dean, is part of the Health Sciences Center, which is an autonomous unit of the University of the Philippines System. The Institute is financed by the Government and by grants from public funds.

Its functions are to provide academic and practical training in public health, to contribute to the knowledge of preventive medicine and public health, to promote the dissemination of such knowledge, and to advance the practice of public health in the Philippines. The Institute serves as: (1) a school of public health giving formal instruction and training to health workers in the Philippines and also to health workers from neighbouring Asian countries; (2) a school for the training of medical technologists, sanitarians, and public health statisticians; (3) a department of preventive medicine, giving instruction in medical microbiology, parasitology, and public health to students of the Colleges of Medicine, Dentistry, Pharmacy, Education, and Nursing of the University of the Philippines System; (4) a research institution engaged in the study of public health problems, particularly in the Philippines; (5) a unit of the University that official and unofficial agencies or individuals may consult on matters of preventive medicine and public health.

The academic year begins in June and ends in March. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 12 months full time or 24 months part time. Two additional specializations are offered, one in veterinary health and one in public health engineering, leading to the degrees of M.P.H.(Vet.) and M.P.H.(E.).

(2) Master of Science in Public Health (M.Sc.P.H.); the course lasts for 24 months full time or 36 months part time; the student may specialize in biometry, medical microbiology, medical parasitology, or nutrition.

(3) Doctor of Public Health (Dr P.H.); the course lasts for a minimum of 24 months full time or 36 months part time.

(4) Master in Hospital Administration (M.H.A.); the course lasts for 14 months full time or 24 months part time.

(5) Certificate in Hospital Administration (C.H.A.); the course lasts for 14 months full time or 24 months part time.

(6) Master of Occupational Health (M.O.H.); the course lasts for 12 months full time or 24 months part time.

(7) Diploma in Dental Public Health (D.D.P.H.); the course lasts for 12 months full time or not more than 36 months part time.

(8) Course for sanitarians and sanitary inspectors lasting 12 months.

Numerous short refresher courses and workshops are also organized.

Conditions of admission

The following groups of students are accepted for the M.P.H., M.P.H.(E.), M.P.H.(Vet.), M.H.A., C.H.A., and M.O.H. courses: (1) graduates of approved medical schools; (2) graduates with appropriate professional training other than in medicine—e.g., dentistry, veterinary medicine, nursing, education, engineering, or administration—with at least a bachelor of science degree and at least 1 year of experience or previous training in an appropriate professional field.

Applicants must comply with the general admission requirements of the Institute by: (1) submitting for the consideration of the Committee on Admissions a completed application form and transcript of their academic record at college; (2) satisfying the Committee on Admissions of their scholastic ability and potentiality for profitable study at graduate level; and (3) if they are from a foreign country where the language of instruction is not English, satisfying the Committee on Admissions that they have an adequate working knowledge of written and spoken English, and passing the Test of English as a Foreign Language of the Educational Testing Service, Princeton, NJ, USA, with a score of at least 500. The age limit for admission is 45 years and applicants must satisfy health requirements. The final decision regarding admission rests with the Committee on Admissions.

Tuition fees are charged. For the academic year 1979–1980 the fee for national and foreign students in the M.P.H. course was P. Pesos 522.50 a semester. Foreign students must also pay a non-citizen's fee of P. Pesos 1000 a semester. Loans towards the payment of tuition fees are granted by the University through the Student Loan Board to a limited number of deserving students. A few grants are provided by the University to Filipino students in financial need. The Government awards graduate scholarships to Filipino students through the National Science Development Board.

Curriculum

There is both an institute and a university curriculum committee. At the Institute the committee members, representing various disciplines, are selected from among the senior members of the faculty. At the Health Sciences Center the members are leading faculty of the colleges. The inclusion of field work in the curriculum ensures that the training is relevant to the health problems of the community.

Students in the M.P.H. course may study under two different plans: Plan A requiring 17 credit units for the core subjects, 11 credit units for the elective subjects, and 6 credit units for a thesis, which must be defended at a special examination; Plan B requiring 17 credit units for the core subjects, 17 credit units for the elective subjects, and a comprehensive written examination.[1] They must, in addition, complete 2 months of practical work in a health agency or laboratory.

Lectures, seminars, workshops, problem-solving, role-playing, and field practice are the predominant methods of instruction. Self-instructional material, simulation, and field visits are used to a lesser extent. The Institute has special arrangements with urban and rural health centres and community development field training areas for the practical training of its students. The management of health services based on primary health care is taught as part of public health administration.

Assessment of students

Methods of assessment consist of written and practical tests, including the observation of students in the field. The final examinations are conducted by members of the teaching staff and cover all the subjects studied. There is a special examination on the thesis for the M.P.H. degree under Plan A, and a comprehensive written examination under Plan B. The examination requirements for the other courses differ, though they generally consist of 1 of 3 options: a comprehensive examination, a thesis, or a special study. Students are required to pass an intermediate examination.

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[1] The number of hours comprising a credit unit varies from 16 to 24, depending on whether laboratory work is included.

Qualification

The Master of Public Health degree (including the M.P.H.(E.) and the M.P.H.(Vet.)) is awarded to candidates who have: (1) been in residence for at least 1 full academic year and completed non-credited residence of at least 6 weeks in a designated health agency or laboratory; (2) gained the necessary credit units; (3) obtained a weighted average grade of 2 or better, no grade below "satisfactory" (2.5–2.75) being considered valid in any subject;[1] and (4) completed a satisfactory thesis or comprehensive written examination.

In the **Philippines**, a postgraduate qualification in public health is required for appointment to all supervisory posts in the public health services, such as those of municipal or provincial health officer, city health officer, or public health engineer, dentist, or nurse.

Name and address	*Year public health course started*	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Institute of Public Health (G. I. S) University of the Philippines System 625 Pedro Gil Ermita MANILA 2801	1928	54 ft	N: 154 (53 m; 101 f) F: 16 (8 m; 8 f)	N: 60 (11 m; 49 f) F: 10 (5 m; 5 f)

Poland

General information

In Poland, the postgraduate training of physicians is carried out by a number of different institutions, such as the Medical Centre of Postgraduate Education, the medical academies,[2] and the research institutions. Liaison between these institutions is effected through their representation on the Programming and Methodology Board of the Medical Centre of Postgraduate Education.

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[1] The grading system is as follows: 1 = excellent; 1.5 = very good; 2 = good; 2.5 = satisfactory; 3 = pass; 4 = conditional; 5 = failure.

[2] The medical academies in Poland are independent institutions not attached to universities but under the direct supervision of the Ministry of Health and Social Welfare. They offer undergraduate and postgraduate medical education.

The Centre is an independent academic institution headed by a director. It is responsible for the programming and organization of postgraduate medical education according to the principles and decisions established by the Programming and Methodology Board. The Chairman of this Board is the Deputy Minister of Health and Social Welfare, and its Vice-Chairman is the Director of the Centre.

Programmes for the postgraduate education of physicians are organized at 2 levels—central and local. The central programme mainly concerns the post-specialization period and includes refresher courses for full specialists organized by the Medical Centre of Postgraduate Education in the clinics and departments of all the relevant academic institutions in the country.

The medical academies and local health service authorities are directly responsible for the local programme which covers continuing education and specialization for physicians.

Postgraduate teaching in social medicine is organized by the Faculty of Social Medicine of the Medical Centre of Postgraduate Education and is carried out in its various departments.

The academic year begins in September and ends at the end of June. The language of instruction is Polish.

Courses offered

The Faculty of Social Medicine within the Medical Centre of Postgraduate Education organizes the following courses:

(1) A course of specialization in social medicine lasting 2 months full time.

(2) Certificate in Organization of Health Care (*Zaświadczenie ukończenia kursu specjalistycznego z organizacji ochrony zdrowia*); a 3-month course in the organization of health care.

(3) One-week refresher courses for physicians who have specialized in the organization of health care and who occupy the post of director of a hospital or head of an integrated health service centre.

(4) Lectures on health organization designed for all students attending other clinical and theoretical courses organized by the Medical Centre of Postgraduate Education.

(5) A course in public health administration designed for non-medical personnel working in the public health services.

The following paragraphs relate particularly to (2), the Certificate in Organization of Health Care course.

Conditions of admission

The specialization of physicians in Poland is governed by the regulations issued by the Minister of Health and Social Welfare on 1 February 1983. According to those regulations applicants for admission to the Certificate in Organization of Health Care course must: (1) hold a basic diploma in medicine, dentistry, pharmacy, or health laboratory technology, or a master's degree in nursing, and (2) have completed 48 months of in-service training in social medicine. There is no entrance examination, no test of linguistic ability, no health requirement, and no age limit for admission. Instruction is free of charge. Foreign students are eligible for enrolment.

Curriculum

A curriculum committee is composed of the Director of the Faculty of Social Medicine, a representative of the Ministry of Health and Social Welfare, and 5 faculty members.

All the subjects are compulsory, with a total of 432 hours of instruction. Lectures, seminars, and workshops are the predominant methods of instruction; problem-solving activities and role-playing are used to a lesser extent; field visits, practical exercises, and self-instructional material are used a little. About one half of the time is devoted to practical and field work carried out in urban and rural health centres and sanitary-epidemiological stations.

Assessment of students

No form of assessment during the course provides the students with information on their progress. The final examination is held before a board of internal and external examiners. It consists of written, oral, and practical tests, which include problem-solving exercises. The students are required to have a satisfactory record of attendance and to present a thesis on problems associated with health care organization. They must also pass an examination in 2 foreign languages.

Qualification

After having completed the course, passed the examinations, and presented an acceptable thesis, candidates are awarded the Certificate in Organization of Health Care. In Poland, possession of this qualification is required of all physicians working in the management and organization of health care services, such as the staff of the Ministry of Health and Social Welfare and the medical staff of other ministries that have their own health care services, the chiefs and other staff of the provincial and district departments of health care and social welfare, the directors of hospitals and other health care units, and the teaching staff of the medical academies.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
Centrum Medyczne Ksztalcenia Podyplomowego (G, I, S) **Studium Medycyny Społecznej** **(Medical Centre of Postgraduate Education Faculty of Social Medicine)** **Ul. Kleczewska 61/63** **01-823 WARSAW**	1960	45 ft	1979	65

Portugal

General information

In Portugal, postgraduate training in public health began in 1904 at the Instituto Central de Higiene. In 1966 the institution was reorganized and renamed the Escola Nacional de Saúde Pública e Medicina Tropical, and in 1972 it was divided into two to become the Instituto de Higiene e Medicina Tropical (Rua de Junqueira 96, 1300 Lisbon) and the Escola Nacional de Saúde Pública. It is the latter institution that now offers postgraduate training in public health in Portugal. The institution is administratively attached to the Ministry of Social Affairs (depending directly from the Secretary of State for Health) and is financed mainly from the national budget. It is administered by 4 central bodies: (a) the Board of Directors (responsible for the overall administration of the institution and for policy decisions in the attainment of its objectives); (b) the Scientific Council (responsible for its technical programme); (c) the Assembly of Representatives (responsible for determining the general guidelines for activities and approving plans of action, budgets, and final reports); and, (d) the Assembly, composed of all staff and students (which meets to receive information and give its opinion on the running of the institution).

The institution's functions are teaching, scientific research, and community educational activities,

The academic year begins in October and ends in September. The language of instruction is Portuguese.

Courses offered

The following courses are organized:

(1) Diploma in Public Health; the course lasts for 1 academic year full time;

(2) Diploma in Hospital Administration; the course lasts for 2 academic years full time;

(3) Diploma in Occupational Health; the course lasts for 9 months part time.

In addition, numerous short courses of up to 1 month's duration are organized on specific subjects, such as hospital accounting, air pollution, and water fluoridation, as well as courses in public health for municipal and hospital engineers.

Conditions of admission

Applicants for the Diploma in Public Health course and the Diploma in Occupational Health course must hold a basic degree in medicine. The Diploma in Hospital Administration course is open to holders of a basic professional qualification in law, economics, sociology, medicine, pharmacy, the political sciences, engineering, or business administration. There is an entrance examination but no test of linguistic ability, no health requirement, and no age limit for admission. Tuition is free of charge. Students may apply to the institution for scholarships and grants; those who receive them must undertake to work for the Ministry of Social Affairs for a period equal to that of the grant, in whatever post the Ministry deems necessary but under the usual terms and conditions for the post.

Curriculum

Each course is monitored by a curriculum committee made up of 3 teachers and 3 students; its president is designated by the Scientific Council. The curriculum for each course relates to the tasks the students should be able to perform at the end of their studies. It is reviewed every 3 years by the Scientific Council, taking into account information on the performance of graduates of the courses received from the health care services.

The curriculum for the Diploma in Public Health course is divided into 3 phases: (1) introduction (intended to sensitize students to the aims of the course); (2) basic training (the study of basic texts concerning public health); and (3) the practice of public health. All the subjects are compulsory, with a total of 849 hours of instruction. The predominant methods of instruction are seminars, workshops, field visits, and field practice; lectures and problem-solving are used to a lesser extent; simulation and role-playing a little. Some of the work is done in groups. The institution has no field training area under its direct control but makes arrangements for the practical training of its students with urban and rural health centres and community development field training areas.

The management of health services based on primary health care is taught in the Diploma in Public Health course.

Assessment of students

Assessment during some of the courses provides the students with information on their progress.

The final examinations for the 3 diploma courses, which are conducted by internal and external examiners, consist of written, oral, and practical tests. Methods of assessment include the observation of students in class and in the field, and problem-solving exercises. A satisfactory record of attendance and success in the intermediate examinations are required. Students must present and defend a thesis.

Qualification

After having attended the necessary courses of instruction, succeeded in the examinations, and presented a satisfactory thesis, candidates are awarded the Diploma in Public Health, the Diploma in Occupational Health, or the Diploma in Hospital Administration. In Portugal, a postgraduate qualification in public health is required for appointment to a post in the public health services, such as that of director of a health centre.

Name and address	*Year public health course started*	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*[a]	*No. of students in the basic public health degree/diploma course(s)*
Escola Nacional de Saude Pública (G, I, S) Av. Padre Cruz 1699 LISBON CODEX	1904[b]	6 ft 34 pt	N: 82 (56 m; 26 f) F: 1 m	N: 30 (18 m; 12 f)

[a] Figures include students in short courses as well as diploma courses.
[b] Date of the first public health course at the Instituto Central de Higiene.

Republic of Korea

General information

In the Republic of Korea, postgraduate training in public health is available at the School of Public Health, Seoul National University and at the Graduate School of Health Science and Management, Yonsei University, Seoul. Both institutions are parts of their universities operating under the jurisdiction of the Ministry of Education. The School of Public Health, Seoul National University is government-owned and financed. The Graduate School of Health Science and Management, Yonsei University, which has taken over the graduate teaching of public health from the Department of Preventive Medicine and Public Health, is financed mainly from private sources and tuition fees, with some assistance from public funds. Both institutions are headed by a dean.

The academic year begins in March and ends in February. The language of instruction is Korean.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course is offered at both

institutions and lasts for 2 years full time. At Yonsei University it may also be followed part time for a period of 2½ years.

(2) Doctor of Public Health (Dr P.H.); the course is offered at both institutions. At Seoul National University it lasts for 2 years and at Yonsei University for 3 years after completion of the M.P.H. course.

(3) Certificate in Public Health Nursing; the course lasts for 1 year and is offered at Seoul National University.

Conditions of admission

Applicants for admission to the M.P.H. course must be graduates of an approved school of medicine, or hold a bachelor's degree in one of the biological sciences or a health-related field, or an equivalent qualification approved by the Ministry of Education.

There is no age limit for admission. Applicants must undergo a medical examination and pass entrance and language proficiency examinations. Previous practical experience may be taken into consideration.

Foreign students are admitted on the same conditions as national applicants.

Tuition fees are charged. At Yonsei University the fee for the M.P.H. course was Won 670 000 for both national and foreign students in the academic year 1981–1982. At Seoul National University the fee was US$ 1000 for the M.P.H. course for both national and foreign students, and US$ 500 for the Certificate Course in Public Health Nursing. Training grants are available from both institutions.

Curriculum

Both institutions have curriculum committees. At Seoul National University the committee is composed of the Dean of the School of Public Health and some members of the faculty. At Yonsei University it is composed of the Deans of the Graduate School, the Medical School, and the Nursing School, the Associate Dean of the Graduate School, the Professor of Preventive Medicine, the Vice-President for Medical Affairs of Yonsei University, and the President of Yonsei University Hospital.

At Yonsei University field work at the community health centre ensures that the curriculum relates to the tasks the students should be able to perform at the end of their studies.

At Seoul National University the students study core subjects and also compulsory subjects within one of the 4 following areas: environmental health, health services administration, health education, or epidemiology and statistics. The total number of hours of instruction for the entire M.P.H. course is 846. At Yonsei University the students study core subjects and choose further subjects from a list of 28 electives. At both institutions field practice and field visits are much used methods of instruction. At Yonsei University problem-solving is also used extensively and lectures and role-playing to a lesser extent.

Both institutions have rural health centres and community development field training areas under their direct control and make additional arrangements with other services and institutions for the practical training of their students. Yonsei University also has an urban health centre under its direct control.

The management of health services based on primary health care is taught at both institutions; at Yonsei University as part of one of the core subjects, health administration, in the Master of Public Health course; at Seoul National University as part of community health field training.

Assessment of students

During some of the courses at Yonsei University students are provided with information on their progress. The final examinations are conducted by a special examinations committee which may include external examiners as well as members of the teaching staff. Students must successfully complete all the required courses of instruction, after which they take a comprehensive examination. They must also present a thesis.

At Seoul National University the final examinations are conducted by internal staff. Methods of assessment include written and oral examinations, the observation of students in class and in the field, problem-solving exercises, and projects. Students must also pass intermediate examinations and present a thesis.

Qualification

After having attended the necessary courses of instruction, completed the necessary assignments, passed the examinations, and submitted a satisfactory thesis, candidates are awarded the degree of Master of Public Health. This qualification is required for appointment to senior administrative posts in the Ministry of Health and Social Affairs, certain teaching posts in schools of medicine, public health, and nursing, and posts in training schools for allied health personnel.

Name and address	*Year public health course started*	*Academic year 1981-1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
School of Public Health (G) Seoul National University Jong-Ro-Gu SEOUL 110	1959	22 ft 26 pt	N: 266 (87 m; 179 f)	N: 213 (78 m; 135 f)
Graduate School of Health Science and Management Yonsei University G.P.O. Box 8044 SEOUL 120	1977	30 ft 15 pt	N: 72 (48 m; 24 f)	N: 68 (42 m; 26 f)

Singapore

General information

In Singapore, postgraduate training in public health is available at the Department of Social Medicine and Public Health, Faculty of Medicine, National University of Singapore. The University is an autonomous institution financed mainly by government grants, with some assistance from private funds and student fees. Postgraduate courses in public health and occupational medicine are organized under the aegis of the School of Postgraduate Medical Studies, which is responsible to the Senate and Council of the University. The chief executive officer of the institution is the Head of the Department.

The main functions of the Department of Social Medicine and Public Health are to teach social medicine and public health at undergraduate and postgraduate levels and to carry out research in public health.

The academic year begins in July and ends in March. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Master of Science in Public Health.

(2) Master of Science in Occupational Medicine.

Both courses extend over 1 academic year (9½ months).

In addition, undergraduate courses in social medicine and public health are organized for medical students and courses in social medicine for students of social studies. Members of the staff teach in the Department of Extramural Studies of the National University of Singapore, as well as in the Public Health Nursing course (Ministry of Health), the Diploma in Social Studies course (National University of Singapore), the Diploma in Education course (National University of Singapore), the Royal Society of Health course, and a basic course in occupational health nursing. Medical officers of the various government services act as part-time lecturers. University staff working at the nearby General Hospital assist in the teaching of social medicine.

Conditions of admission

Applications for admission to the Master of Science in Public Health or the Master of Science in Occupational Medicine courses must hold either a medical qualification registrable in Singapore or Malaysia, or another medical qualification acceptable to the Senate, and have had 1 year's professional experience.

There is no entrance examination, no language proficiency test, and no age limit for admission. All applicants must undergo a medical examination. Tuition fees are charged; the fee for the Master of Science in Public Health course for the academic year 1979–1980 was Sing.$ 600. The course is open to foreign students, who pay a tuition fee of Sing.$ 900. Fees are also charged for the other courses. Students may apply to the University for scholarships.

Curriculum

The curriculum is reviewed yearly by staff members of the Department. During the first 2 terms the students must study compulsory subjects. For the final term they may choose to concentrate on 1 of 3 main areas: public health administration, primary health care, or occupational health; elective subjects are chosen accordingly. The total number of hours for the whole course is approximately 700; it varies slightly with the area of concentration chosen.

Teaching consists of classroom instruction and practical training. Discussions and seminars are held at intervals. The practical training includes demonstrations and exercises, as well as simulation, problem-solving, and role-playing, the preparation of memoranda containing statistical data, and visits to places and institutions of public health importance in Singapore and Malaysia. Field training plays an important part; the institution makes arrangements for the practical training of its students with both urban and rural health centres and community development field training areas.

The management of health services based on primary health care is taught as part of an elective subject in the Master of Science in Public Health course.

Assessment of students

The final examination for the Master of Science in Public Health degree is held on completion of the course and comprises written, oral, and practical tests. It is conducted by a board of internal and external examiners, the external examiners usually coming from other countries. The questions set in the examination may relate to any part of the course.

Methods of assessment include the observation of students in class and in the field, problem-solving exercises, and projects. The students must present a dissertation on a subject approved by the Head of the Department, which must be submitted during the last term of the academic year. A satisfactory record of attendance and success in the intermediate examinations are also required.

Qualification

The degree of Master of Science in Public Health or Master of Science in Occupational Medicine is awarded to candidates on completion of the course, who have succeeded in the examinations and presented an acceptable thesis. The degree is recognized by the General Medical Council of the United Kingdom of Great Britain and Northern Ireland.

In Singapore, a Master of Science in Public Health or a Master of Science in Occupational Medicine degree is not a requirement for employment in the public health services. It is desirable, however, for candidates for appointment to senior posts in the following areas to possess it: at the Ministry of Health, in primary health care or hospital administration; at the Ministry of Environment, in the Division of Epidemiology and Quarantine; at the Ministry of Defence, in occupational health or public health; at the Ministry of Labour, in the Division of Industrial Health; and at the National University of Singapore, in the teaching of public health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Social Medicine and Public Health Faculty of Medicine National University of Singapore Outram Hill SINGAPORE 0316	1953	16 ft 76 pt	N: 393 (348 m; 45 f) F: 63 m	N: 5 (2 m; 3 f) F: 3 f

Spain

General information

In Spain, postgraduate training in public health is organized by the National School of Public Health, Madrid and the provincial schools that fulfil the role of teaching centres (such as those at Barcelona, Salamanca, Melilla, Granada, the Balearic Isles, Las Palmas de Gran Canaria, and Tenerife). The institution depends directly from the Ministry of Health and Consumer Affairs which provides its finances and also maintains a direct link with the Faculty of Medicine, University of Madrid. It is headed by a director.

The functions of the institution are to teach public health at different levels and to different categories of personnel—e.g., physicians, veterinarians, nurses, and biologists—and to carry out research in public health.

The academic year begins in January and ends in December. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Diploma of Public Health Officer (*Oficial Sanitario*); the course lasts for 12 months and is an advanced course in public health.

(2) Course in Public Health for physicians specializing in preventive medicine and public health; the course, which forms part of a 3-year programme, lasts for 1 year.

(3) Diploma in Public Health; the course lasts for 3 months part time and is a basic course in public health open to physicians, veterinarians, and pharmacists.

(4) Course in Public Health for fully-qualified nurses, lasting for 9 months.

(5) Course in Supervision for nurses, lasting for 9 months.

(6) Course for health inspectors, lasting for 3 months.

(7) Course for administrators and directors of hospitals, organized by the National School of Public Health but taught at the School of Hospital Administration. The course lasts for 1 year and may be supplemented by a further 1-year course in hospital administration.

(8) Short courses in food hygiene, environmental pollution, and immunology.

In addition, there are numerous short courses on specific topics of public health interest, such as the health control of public drinking-water supplies, seroepidemiology, rabies, microbiology in public health, the bacteriology and immunology of meningococcic meningitis, zoonoses, health sociology, and health education.

The following paragraphs refer mainly to the Diploma of Public Health Officer course and the Course in Public Health for physicians.

Conditions of admission

Applicants must be university graduates (*licenciado*) in medicine, veterinary science, or pharmacy; professional qualifications and experience are taken into account in their selection. There is no age limit for admission, no medical examination, and no language proficiency requirement.

A tuition fee is charged; for the academic year 1980–1981 the fee was Ptas. 800. No training grants are provided by the institution. Foreign students are eligible for admission.

Curriculum

The Director and the teaching and research staff plan and coordinate the curricula of the various courses offered.

The Diploma of Public Health Officer course consists of a fixed programme for all students, at which attendance is obligatory. The number of hours of instruction is 1500. Lectures are the main method of instruction; field practice and self-instructional material are used to a lesser extent. The institution has urban and rural health centres under its direct control; it also makes arrangements with other services for the practical training of its students.

Assessment of students

The final examinations consist of written, practical, and oral tests conducted by members of the teaching staff. The performance of students in class and in the field is observed. Students in the Diploma of Public Health Officer course and the Course in Public Health for physicians must present a thesis.

Qualification

On having completed the course, succeeded in the examinations, and presented a satisfactory thesis, candidates receive the title of Public Health Officer.

Name and address	*Year public health course started*	*Academic year 1980-1981*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Escuela Nacional de Sanidad	1925	23 ft	N: 400[a]	N: 28
Facultad de Medicina		42 pt	(240 m; 160 f)	(17 m; 11 f)
Universidad Complutense de Madrid				
Ciudad Universitaria				
Pabellon 1			F: 8 m	F: 2 m
MADRID 3				

[a] Includes the total number of students in all courses, some of which are offered more than once a year.

Sudan

General information

In the Sudan, postgraduate training in public health is available at the Department of Community Medicine, University of Khartoum. The institution is part of the University and coordinates closely with the Ministry of Health, which provides its financial support. It is headed by a coordinator and administered by the Postgraduate Medical Board of the University.

The academic year begins in January and ends in August. The language of instruction is English.

Courses offered

The following course is organized:

Master of Community Medicine (M.C.M.); the course lasts for 2 years.

Conditions of admission

Applicants must hold a degree in medicine and have had 3 years of service as a medical officer. There is an entrance examination and a language proficiency examination but no health requirements and no age limit for admission. Foreign students are admitted. A tuition fee is charged; during the academic year 1979–1980 it was Sudan £720 for both foreign and national students.

Curriculum

The curriculum relates to defined tasks that the students should be able to perform at the end of their studies. A degree committee, which includes representatives of the Ministry of Health, is responsible for the design and review of the curriculum and, in its deliberations, takes into account the opinions of students, graduates, and consultants.

During the first year the students study obligatory subjects and during the second year elective subjects, mainly through field work. The number of hours of instruction is 2400.

The predominant methods of instruction are lectures, seminars, workshops, field training, and problem-solving. Self-instructional material is used; role-playing is used a little. The institution has no field training areas under its direct authority but makes arrangements for the practical training of its students with urban and rural health centres and community development field training areas.

The management of health services based on primary health care is taught as part of primary health care, and health development, planning, and management.

Assessment of students

The final examination, which is conducted by a special committee consisting of internal and external examiners, includes written, oral, and practical tests. Methods of assessment include the observation of students in class and in the field and problem-solving exercises. The satisfactory completion of projects, on which the students base their theses, is also required, as is a satisfactory record of attendance.

Qualification

After having attended the necessary courses of instruction, succeeded in the examinations, and presented a thesis and defended it satisfactorily, candidates are awarded the degree of Master of Community Medicine. A postgraduate qualification in public health is required in the Sudan for appointment to the posts of provincial or regional deputy director of health services, or special programme officer (e.g., in primary health care).

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Department of Community Medicine (G, I, S) Faculty of Medicine University of Khartoum KHARTOUM	1977	15 ft 20 pt	N: 20 (19 m; 1 f)	N: 20 (19 m; 1 f)

Sweden

General information

Physicians and other health personnel from Denmark, Finland, Iceland, Norway, and Sweden may obtain postgraduate training in public health at the Nordic School of Public Health, Göteborg, an independent institution for higher education and research in public health operating under the jurisdiction of the Nordic Council of Ministers. The cost of operating the institution is divided between the 5 countries according to the amount of course time each one uses during the year.

The institution is run by a board of management which consists of 1 representative from each participating country. An educational advisory committee consists of representatives of the teachers, the students, and the main national organizations within the health and social services. The chief executive officer is a rector.

The academic year begins in August and ends in June. Instruction is given in the Scandinavian languages, and the students are required to have an understanding of English.

Courses offered

A postgraduate course in public health is organized consisting of a period of theoretical study of 8 months' duration, followed by a year of practical work. During the period of theoretical study the programme consists of 4 short courses, each lasting about 2 months, in the following subjects:

(*a*) epidemiology and biostatistics;

(*b*) social and preventive medicine;

(*c*) health care and hospital administration;

(*d*) environmental hygiene, water sanitation, and food control and nutrition.

These courses are also given separately and can be taken independently of each other over a number of years. In addition, 1-month courses are given on dental public health, social paediatrics, and hospital hygiene which may be studied as elective subjects or substituted as alternatives to compulsory subjects.

Conditions of admission

As a rule, the only formal admission requirement is a basic academic degree in the field of medical and social services, together with some practical work experience. There is no age limit, or medical, or entrance examination. Students from outside Scandinavia are admitted in certain special circumstances.

Tuition is free of charge. Students who are accepted are given free travel to and from Göteborg, a grant of Skr. 500 a month, and a room at a student hostel.

Curriculum

A curriculum committee consists of the Rector, representatives of employers in the Scandinavian countries, former students, and members of the academic staff.

Teachers from outside the institution are used extensively, thus securing access to the knowledge of leading experts in the field of public health in the Scandinavian countries.

Particular emphasis is placed on subjects and problems of special relevance to the Scandinavian countries, such as epidemiology and biostatistics, planning, health and social service economics, and health care administration. Consideration is given to the different social factors that can influence the community as a whole as well as the health and well-being of the individual. Preventive medicine, community medicine, and environmental hygiene are therefore important subjects. Compulsory core subjects are studied for a total of 1128 hours; a further 136–240 hours may be spent on elective subjects, depending on the subject chosen.

The institution has no health centre or field training area under its direct control but students make visits to different urban and rural institutions for their practical training.

It is intended to offer additional courses in the future on such subjects as the delivery of health care services, dental public health, social paediatrics, food safety and hygiene, environmental hygiene, nursing research, and hospital hygiene.

The management of health services based on primary health care is taught as part of health care administration.

Assessment of students

There is no final examination but students must take tests in connection with their practical work and attend compulsory group activities and seminars. All parts of the core programme end with a written or oral examination conducted by members of the internal teaching staff.

Qualification

No special diploma is awarded; the course is considered to be equivalent to a diploma in public health course. In Sweden, this qualification is a formal requirement for appointment as a county public health officer; in Norway, it is necessary for that type of post in practice, though it is not a statutory requirement.

Name and address	*Year public health course started*	*Academic year 1980–1981*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Nordiska Hälsovårdshögskolan (Nordic School of Public Health) Medicinaregatan S-413 46 GÖTEBORG	1953[a]	8 ft Approx. 400 visiting lecturers	N: 425	N: 175

[a] Year in which the first course in biostatistics and epidemiology was organized. The Nordic School of Public Health was established in 1962.

Switzerland

General information

In Switzerland, postgraduate training in public health is available at the Faculty of Medicine, University of Geneva, which comes under the jurisdiction of the Canton of Geneva Public Education Department. The Faculty of Medicine is primarily responsible for teaching medicine to undergraduate students but it also offers opportunities for postgraduate studies in various fields. It is financed mainly from public sources and is headed by a dean.

The course offered is the direct responsibility of the office of the Dean of the Faculty of Medicine and not the Institute of Social and Preventive Medicine. It may be followed in conjunction with courses offered by the Geneva University Institute of Development Studies.

The academic year begins in October and ends in June. The language of instruction is French.

Courses offered

The following course is organized:

Certificate in Community Health (*Certificat en Santé communautaire*); the course lasts for 1 year part time.

Conditions of admission

Applicants must have a university degree or diploma or be employed in a health or health-related profession. The academic qualifications and work experience of each applicant are assessed. There is no entrance examination, no medical examination, and no age limit for admission.

There is no registration or tuition fee specifically for the course but students must be registered at the University. They are expected to purchase books and learning materials costing approximately S. Frs 500. The institution does not provide training grants. Foreign students are admitted.

Curriculum

An informal curriculum committee meets when necessary. In addition to one permanent staff member, various members of the Faculty of Medicine and experts from outside the Faculty—e.g., from the World Health Organization and the International Committee of the Red Cross—teach during the course.

The course consists of 1 afternoon a week for 1 academic year devoted to seminars in specific areas and required reading and personal work. All the subjects are compulsory, with a total of 100 hours of instruction. Teaching methods include lectures, field visits, video illustrations, practical exercises, and self-learning material.

Assessment of students

The examination, which is written, takes place at the end of the course and is conducted by members of the teaching staff. Students must prepare a dissertation which is evaluated by internal and external examiners. A satisfactory record of attendance is also required.

Qualification

After having completed the course, succeeded in the examination, and presented a satisfactory dissertation, candidates are awarded the Certificate in Community Health. A postgraduate qualification in public health is not a prerequisite for employment in any post in Switzerland.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Unité de Santé communautaire (G. I) Faculté de Médecine Université de Genève 24 rue Micheli-du-Crest 1211 GENEVA 4	1982	1 ft 21 pt[a]	N: 8 (4 m; 4 f) F: 8 (5 m; 3 f)	N: 8 (4 m; 4 f) F: 8 (5 m; 3 f)

[a] Visiting lecturers.

Thailand

General information

In Thailand, postgraduate training in public health is available at the Faculty of Public Health, Mahidol University, Bangkok. The University, like all other universities in Thailand, comes under the jurisdiction of the Ministry of University Affairs. It is administered by the Faculty Board and headed by a dean. Its budget is covered mainly by government subventions and, to a small extent, by student fees.

In addition to postgraduate training in public health, the institution is responsible for undergraduate education in various fields of public health, the in-service training (at college level) of health personnel, and the training of auxiliary health workers for urban areas.

A 4-year bachelor of science in public health undergraduate course is offered at the Faculty of Public Health, Khon Kaen University, Khon Kaen.

The academic year begins in May and ends in March. Thai is the main language of instruction, but the Master of Public Health course is also taught in English.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 10 months.

(2) Master of Science in Public Health (M.Sc.).

(3) Master of Science in Biostatistics (M.Sc.).

(4) Master of Science in Environmental Health Engineering.

(5) Master of Science in Industrial Hygiene and Safety.

Courses (2)–(5) last for 20 months.

Conditions of admission

Applicants for the M.P.H. course must hold a basic medical degree (M.D.), dental degree (D.D.S.), or veterinary degree (D.V.M.) from Mahidol University or another recognized institution. Applicants for the M.Sc. course must hold a bachelor of science degree (B.Sc.) in public health, public health nursing, nursing, nutrition, health education, or a related subject. One year of professional experience in public health or a related field is also required. There is no age limit for admission. All applicants must undergo a medical examination. National applicants for the M.Sc. course must take an entrance examination and, since a thesis is required in English, an English language proficiency test. Foreign students are admitted to the M.P.H. programme; they are selected and sponsored by the South East Asian Ministries of Education Organization.

A tuition fee is charged. It amounts to Baht 1500 for national students and Baht 15000 for foreign students. Some training grants are available from the University and from international agencies.

Curriculum

The curriculum is designed and reviewed by a curriculum committee, composed of 7 heads of designated departments or their representatives. The evaluation of the students' performance during their field training and a programme for the follow-up of graduates ensures that the curriculum is relevant to the tasks the students will perform on graduation.

Two M.P.H. programmes are offered, one taught in the Thai language and one in English; the latter—the International Programme—is followed by both national and foreign students. The course consists of core subjects taken by each student, which constitute 15 credit units.[1] The student must also choose one area of specialization out of a possible 3—general public health, hospital administration, or urban health—which consists of compulsory subjects constituting another 15 credit units. In addition, the student must acquire 7 credit units from elective subjects, which may be chosen from a list of over 50 offered by different departments of the University.

Lectures, problem-solving activities, and field practice are the predominant methods of instruction. Self-instructional material is also used. Seminars, workshops, simulation, and field visits are used to a lesser extent. The field work takes the form of a rural health development exercise; the student spends 6 weeks of the last term working as a member of a multidisciplinary team in an assigned area. The objectives of the field training are to enable the student to apply the knowledge learnt in the classroom to a comprehensive health development project in a rural area, and to participate in the provision of community health services to the rural population.

The management of health services based on primary health care is taught as part of general public health and public health administration.

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[1] A credit unit corresponds to 16 hours of lectures or 32 hours of laboratory work.

Assessment of students

During some of the courses assessment provides the students with information on their progress.

The final examinations are conducted by a special committee composed of internal and external examiners. They consist of written and practical tests. Methods of assessment include the observation of students in class and in the field, projects, and problem-solving exercises. Students are not permitted to take an examination in any subject unless they have attended for at least 80 % of the time. Success in the intermediate examinations is also required. Students in the M.Sc. course are also examined orally and must present a satisfactory thesis.

To obtain the Master of Public Health degree a candidate must have gained a grade point average of not less than 3 out of 4.

Qualification

In Thailand, a postgraduate qualification in public health is not obligatory for employment in any post but physicians in public service without such a qualification are encouraged to pursue their studies to obtain it.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Faculty of Public Health (G, I, S) Mahidol University 420/1 Rajvithi Road BANGKOK 4	1948	159 ft 300 pt	N: 102 (31 m; 71 f) F: 8 (6 m; 2 f)	N: 21 (15 m; 6 f) F: 8 (6 m; 2 f)

Turkey

General information

In Turkey, postgraduate training in public health is available at 15 institutions, 14 of which are departments of public health of university faculties of medicine. The remaining institution is the School of Public Health, Ankara. Departments of public health of other universities may offer postgraduate training in public health in the future as required. All the institutions are headed by a director.

The universities in Turkey are autonomous institutions coordinated by the Council of Higher Education. They are supported from the national budget and financially controlled by the Government.

Postgraduate training in public health may follow two paths: (1) specialist diplomas in all branches of medicine, including the Diploma in Public Health, are awarded by the Ministry of Health and Social Assistance, which delegates the responsibility for training to the School of Public Health, Ankara and the departments of public health in the faculties of medicine of the various universities; (2) within each university there is an institute of health sciences which is authorized to award the degree of master or doctor, including degrees in medicine, nursing, dentistry, and pharmacy. The institutes delegate training in public health to the departments of public health of their universities.

The School of Public Health, Ankara is attached directly to the Ministry of Health and Social Assistance. In addition to providing training, it conducts surveys and acts as consulting agency in the field of public health to the Ministry. Community health is taught to its own undergraduate students and also to those attending the Environmental Health College and the Health Education Institute.

The university departments of public health undertake the training of undergraduate medical students in community health, epidemiology, and statistics, and of postgraduate students in public health. In addition to providing theoretical instruction, each department administers one or more health centre which provide primary health care to the local population and may undertake research. Sixth-year medical undergraduates undergo practical training at the health centres, as do students in the second year of the postgraduate public health courses. The departments of public health cooperate with the Tuberculosis and Chest Diseases Dispensary and the Malaria Eradication Unit of the Ministry of Health and Social Assistance.

At universities in Turkey the academic year begins in September or October and ends in June. However, the postgraduate public health courses, including those at the School of Public Health, Ankara, may start and end at any time, depending on the programme. The language of instruction is Turkish.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.).

(2) Master of Public Health.

(3) Doctor of Public Health (Ph.D.).

The courses last for 2 to 3 years and are offered at all institutions.

The Department of Public Health, Hacettepe University also offers courses leading to the degrees of master or doctor in occupational health, health education, or biostatistics.

The School of Public Health, Ankara offers a specialization course in occupational health which lasts for 1 year after the course in public health. It also offers a number of short courses lasting 1–3 months for different categories of health personnel—e.g., in health education and medical statistics for nurses and health technicians; in epidemiology for graduates of the Health Education Institute; in socialized health services adaptation for various categories of personnel; and in tuberculosis and chest diseases for physicians.

Conditions of admission

A basic medical degree is required for admission to the D.P.H. course. A medical degree or a degree in a health-related field is required for admission to the Master of Public Health or the Doctor of Public Health course. All the institutions require applicants to pass a language proficiency test; none requires a medical examination. Applicants for the D.P.H. course must sit a competitive entrance examination; those who succeed are appointed to the staff of the department of public health and work mainly as residents at health centres run by the department. Applicants for the Master or Doctor of Public Health course sit a qualifying entrance examination. The age limit for admission to the courses at Hacettepe University is 30 years; at the other institutions it is 35 years. All categories of trainee at the School of Public Health, Ankara are in government service; they do not pay tuition fees and their salaries are maintained for the duration of their studies. At all the other institutions tuition in the D.P.H. course is free of charge; the students are paid a salary during their period of residency at a health centre.

Curriculum

At all the institutions curriculum committees, composed of senior staff, design and revise the curricula. The curricula of the School of Public Health, Ankara are submitted to the Ministry of Health and Social Assistance for approval. The curricula are designed to meet objectives established by analysing the tasks of health officers at the health centres and the health district offices.

The regulations for the D.P.H. course require the students to undertake academic studies in public health for a minimum of 6 months followed by a residency (generally lasting 2 years) at a health centre. Some institutions, but not all, require the students to undergo a period of clinical training during their first year when they work as junior residents in general practice in the clinics and outpatient departments of community hospitals and medical centres attached to the schools of medicine. The academic training consists of instruction in the form of lectures, seminars, laboratory work, problem-solving exercises, and field visits to public health institutions, such as veterinary laboratories. All the subjects are compulsory with 705–1507 hours of instruction, depending on the institution. During the last part of the course—the supervised residency—the students work as heads of rural health units which provide comprehensive medical services to communities of 5000–10 000 people. Senior residents are expected to provide home and ambulatory patient care, and to lead the staff of the unit in disease prevention. Under the supervision of senior staff they also teach undergraduate medical students, who spend 6 weeks at health centres to consolidate their training in community and preventive medicine. During their residencies the students meet at the community hospital one afternoon a week to discuss clinical, administrative, and public health problems. They must also carry out at least one epidemiological or administrative study as a basis for a thesis, which is written during this period.

At the School of Public Health, Ankara the management of health services based on primary health care is taught as part of public health administration and as a separate core subject.

Assessment of students

During some of the courses of instruction at all the institutions the students are provided with information on their progress.

Methods of assessment at all the institutions include the observation of students in the field, problem-solving exercises, and written and oral examinations. The final examinations are conducted by members of the teaching staff. Students are required to present a thesis.

Qualification

After having attended the necessary courses, completed the field work and other assignments, and presented a thesis and defended it satisfactorily, candidates are awarded the degree of Diploma in Public Health. In Turkey, a postgraduate qualification in public health is required for appointment to senior administrative posts in the Ministry of Health and Social Assistance, and the posts of provincial or municipal health director, or director of a field training and research area.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
Halk Sağlığı Ana Bilim Dali[a] **(Department of Public Health)** **Faculty of Medicine** **Çukurova University** **ADANA**	1974	8	..	N: 3 m
Halk Sağlığı Ana Bilim Dali[b] **(Department of Public Health)** **Faculty of Medicine** **Ankara University** **ANKARA**	1972	3	..	3 m; 3 f
Halk Sağlığı Ana Bilim Dali **(Department of Public Health)** **Faculty of Medicine** **Hacettepe University** **ANKARA**	1966	55 ft	N: 25 (17 m; 8 f)	N: 22 (17 m; 5 f)

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
Hifzıssıhha Okulu **(School of Public Health)** **Cemal Gürsel Caddesi 18** **Yenişehir** **ANKARA**	1936		N: 7 (5 m; 2 f)	N: 7 (5 m; 2 f)
Department of Public Health **Faculty of Medicine** **Gazi University** **ANKARA**	1980	3	2 m	—
Department of Public Health **Faculty of Medicine** **Akdeniz University** **ANTALYA**	1982	2	—	—
Halk Sağlığı Ana Bilim Dalı[a] **(Department of Public Health)** **Faculty of Medicine** **Uludağ University** **BURSA**	1975	4 ft	2 m	2 m
Department of Public Health **Faculty of Medicine** **Dicle University** **DIYARBAKIR**	1968	4	2 m	—
Halk Sağlığı Birimi[b] **(Department of Public Health)** **School of Medicine** **Anadolu University** **ESKIŞEHIR**	1977	10	2 m	—
Department of Public Health **Faculty of Medicine** **Istanbul University** **ISTANBUL**	...	...	...	...
Department of Public Health **Cerrahpaşa School of Medicine** **Istanbul University** **ISTANBUL**	1967	8	15	7
Department of Public Health **Faculty of Medicine** **Ege University** **IZMIR**	1965	6	...	3
Department of Public Health **Faculty of Medicine** **Dokuz Eylül University** **IZMIR**	1978	3	...	3
Department of Public Health **Faculty of Medicine** **19 Mayis University** **SAMSUN**	1978	2	—	—
Department of Public Health **Faculty of Medicine** **Cumhuriyet University** **SIVAS**	1982	1	1 m	—

[a] 1982–1983 figures.
[b] 1981–1982 figures.

Uganda

General information

In Uganda, postgraduate training in public health is available at the Institute of Public Health, Makerere University Medical School, Kampala. The course was established in 1967. Up to that date postgraduate medical students seeking higher qualifications were obliged to study overseas.

In 1970 the University of East Africa was dissolved and replaced by Makerere University, Uganda, the University of Nairobi, Kenya, and the University of Dar es Salaam, Tanzania, so that postgraduate medical training might be pursued locally within the limits of available resources. The institution is financed by the Government of Uganda.

The academic year begins in July and ends in March. The language of instruction is English.

Courses offered

The following course is organized:

Diploma in Public Health; the course lasts for 9 months.

Conditions of admission

There is no age limit for admission. The course is open only to graduates in medicine—holders of the M.B., Ch.B. degree or an equivalent qualification. In addition, applicants must have had at least 12 months' experience as fully registered medical practitioners and possess a good working knowledge of English. There is no entrance examination but good references and satisfactory academic reports are taken into consideration. No medical examination is required.

Foreign students are eligible for admission. A tuition fee is charged; for the academic year 1979–1980 the fee was Sh. 8000 (excluding the expenses connected with field projects) for both national and foreign students.

Curriculum

The curriculum is designed by the staff of the institution. All the subjects are compulsory, with a total of 870 hours of instruction, excluding the time spent on field work and the preparation of a dissertation. Lectures are the most important method of instruction; seminars, workshops, field visits, field practice, and problem-solving are used to a lesser extent; and simulation and role-playing a little. Self-instructional material is also used to some extent. The institution has urban and rural health centres and community field training areas under its direct control; it also makes arrangements with other health centres for the practical training of its students.

The student devotes 1 month to a field survey or research project of his own choice which he carries out in Uganda or an adjacent country, working under the guidance of an experienced tutor. Another month is devoted to data processing and the preparation of a dissertation.

The management of health services based on primary health care is expected to be introduced as a subject of the course in the near future.

Assessment of students

The examination for the Diploma in Public Health is held at the end of the course and consists of written, oral, and practical tests, which include the observation of students in class and in the field. In addition, the student must pass an intermediate examination and present and defend a dissertation. The examination takes place before a board of internal and external examiners.

Qualification

Candidates who have attended the requisite courses of instruction, succeeded in the examination, and presented a dissertation and defended it satisfactorily receive the Diploma in Public Health. In Uganda, this qualification is a requirement for employment as a medical officer of health of the City of Kampala or another large municipality; as a district medical officer or senior medical officer in charge of a region; in a senior administrative post in the Ministry of Health; and in a teaching and research post in the field of public health at an institution of higher learning.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Institute of Public Health Makerere University Medical School P.O. Box 7072 KAMPALA	1967	7 ft 4 pt	N: 10 (9 m, 1 f)	N: 10 (9 m, 1 f)

Union of Soviet Socialist Republics

General information

In the USSR, postgraduate training in public health is available at 15 of the 16 postgraduate medical institutes (institutes for advanced medical studies). These institutions are State establishments for the advanced training of physicians in all specialities, including public health. In addition to postgraduate training they are deeply involved in biomedical research. The institutions are teaching establishments operating under the authority of the Ministry of Health of the USSR by whom they are financed. At the head of each institution is a rector.

The academic year begins in September and ends in June. The language of instruction is Russian. The International Course in Public Health Administration, held at the Central Institute for Advanced Medical Studies, Moscow is given in Russian and English. Some of the other courses at the Central Institute of Advanced Studies may be given in Spanish, French, or another language.

Courses offered

The following courses are organized:

(1) Social Hygiene and Public Health Administration; the specialization course lasts for 5 months, the general training course for 2 months or 4 months, depending on the posts occupied by the participants, and the course on special subjects from 1 to 2 months. The programme is designed for senior staff in health establishments of various kinds and is offered at all the institutions.

(2) Public Health Administration; an international course organized with the cooperation of WHO; the course lasts for 9 months and is held at the Central Institute for Advanced Medical Studies, Moscow.

(3) Health Statistics; the specialization course lasts for 3 months, the general training course for 2 months, and the course on special subjects from 1 to 2 months. The programme is designed for workers in public health administration and is given at the Central Institute for Advanced Medical Studies, Moscow.

In addition, short-term courses are organized at all the institutions for the purpose of improving qualifications. They last up to 2 months and deal with all aspects of public health.

Special courses in public health are arranged for foreign students at the request of national governments.

The information given below relates particularly to the courses on social hygiene and public health administration and to the International Course in Public Health Administration.

Conditions of admission

Applicants should have a basic medical qualification and at least 5 years of experience in their speciality. They must be recommended by the public health authorities of the area in which they work. There is no entrance or medical examination and no test of linguistic proficiency. Previous practical experience is taken into account. There is no age limit but applicants must be in active employment. Foreign students are accepted for the International Course in Public Health Administration on the recommendation of WHO or under a bilateral intergovernmental agreement. Instruction is free of charge for all students. National students continue to receive their normal salaries; supplementary grants may be awarded in some instances. Foreign students normally hold a fellowship from an international organization or from one of their own national organizations.

Curriculum

The curricula for the courses in social hygiene and public health administration, which are common to all the institutions, are designed and revised by a committee composed of the deans of faculty and heads of department of all the institutions and a representative of the Ministry of Health.

The specialization course, which lasts for 5 months, is normally taken immediately after obtaining the first medical degree. A minimum of 5 years is then spent as a practising physician, after which those who wish to continue their studies take the general training course, the duration and curriculum of which varies, depending on the professional posts and existing knowledge of the participants. For example, there are programmes for: (1) deputy ministers, heads of boards and departments at the ministries of health of the Union and the autonomous republics, and heads of *oblast* and *kraj* health departments lasting for 4 months and comprising 624 hours of instruction; (2) chief medical officers of urban and rural hospitals and their deputies lasting for 2 months and comprising 312 hours of instruction; (3) chief medical officers of urban and rural polyclinics and their deputies; (4) heads of sanitary and epidemiological centres and their deputies; and (5) the senior staff of other specialized health establishments. Public health administrators may take further 2-month courses on special aspects of the subject in order to deepen their knowledge. All subjects are compulsory. The International Course in Public Health Administration comprises 900 hours of instruction.

The main methods of instruction are lectures, seminars, workshops, group discussions, problem-solving, and field work. Some of the institutions use self-instructional material, simulation, and role-playing. The Central Institute for Advanced Medical Studies, Moscow uses television in teaching some subjects, and some subjects may be taken by correspondence. Special attention is paid to individual training.

Most of the institutions have urban or rural health centres or community development field training areas under their direct control for the field training of their students. Extensive arrangements are also made with other urban and rural health centres, sanitary and epidemiological centres, children's clinics, and other health establishments. Field work in connection with the International Course in Public Health Administration may take place outside the USSR.

The management of health services based on primary health care is taught in the courses given to chief medical officers of rural and urban hospitals, and heads of rural district sanitary and epidemiological centres, and also in courses for general practitioners and physicians in the emergency services.

Assessment of students

Methods of assessment include the observation of students in class and in the field, projects, special assignments, problem-solving exercises, and examinations. A course paper must be presented and the student is required to defend it during a special examination, at which members of the teaching staff and other students are present. Representatives of the Ministry of Health may also attend. The final examinations are conducted by an examinations committee consisting of members of the teaching staff and representatives of the Ministry of Health or the local health authority.

Qualification

After having attended the necessary courses of instruction and satisfactorily completed the required assignments, succeeded in the examinations, and presented a course paper and defended it satisfactorily, the candidate is given a certificate (*svidetel'stvo*) stating that he has completed the course. Those who have completed the 9-month international course are awarded a diploma and the title of Specialist in Social Medicine and Public Health. In the USSR, a certificate attesting to the completion of a course of advanced studies in public health administration is a requirement for appointment to the posts of head and deputy head of *oblast* health departments, and chief medical officer and deputy chief medical officer of a health establishment or institution. Other public health administrators are expected to undertake the types of postgraduate training relevant to their particular posts.

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic postgraduate public health degree/diploma course(s)*
AZERBAIJAN SSR				
Azerbajdžanskij Institut Usoveršenstvovanija Vračej Tbilisskij Prospekt 3165 BAKU	1935	147	2170	80

Name and address	Year public health course started	Academic year 1982–1983		
		No. of teaching staff	No. of students in all courses	No. of students in the basic post-graduate public health degree/diploma course(s)
BYELORUSSIAN SSR				
Belorusskij Institut Usoveršenstvovanija Vračej Ul. Petrusja Brovki 3 220714 MINSK	1932	265	5346	309
GEORGIAN SSR				
Tbilisskij Gosudarstvennyj Institut Usoveršenstvovanija Vračej (G, I, S) Prospekt Čavčavadze 33 380030 TBILISI	1935	180	2970	92
KAZAKH SSR				
Alma-Atinskij Institut Usoveršenstvovanija Vračej Ul. Čapaeva 34 ALMA-ATA	1963	188	3950	200
RUSSIAN SFSR				
Uralskij Institut Usoveršenstvovanija Vračej Prospekt Pobedy 287 ČELJABINSK 454026	1982	32	1095	160
Irkutskij Institut Usoveršenstvovanija Vračej Deputatskaja ul. 45/2 IRKUTSK 664023	1981	61	1174	40
Kazanskij Gosudarstvennyj Institut Usoveršenstvovanija Vračej (G, S) Ul. Komleva 11 420012 Kazan' 12	1922	205	3775	150
Leningradskij Institut Usoveršenstvovanija Vračej Ul. Saltykova-Ščedrina 41 LENINGRAD	1906	431	9213	336
Central'nyj Ordena Lenina Institut Usoveršenstvovanija Vračej Barrikadnaja 2 123242 MOSKVA	1931	604	14327	1238[a]
Novokuzneckij Institut Usoveršenstvovanija Vračej Ul. Stroitelej 5 NOVOKUZNECK 654011	1927	185	3453	170
Penzenskij Institut Usoveršenstvovanija Vračej Ul. Krupskoj 3 PENZA 440039	1981	73	1350	40

Name and address	*Year public health course started*	*Academic year 1982–1983*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
UKRAINIAN SSR				
Ukrainskij Institut Usoveršenstvovanija Vračej (G, I, S) Ul. Artema 8 HAR'KOV 310002	1923	370	7020	170
Kievskij Institut Usoveršenstvovanija Vračej (G) Ul. Dorogožickaja 9 252112 KIEV 112	1918	432	7673	422
Zaporožskij Institut Usoveršenstvovanija Vračej Ul. Vintera 20 ZAPOROŽ'E 330010	1926	140	2526	236
UZBEK SSR				
Taškentskij Institut Usoveršenstvovanija Vračej (G, I, S) Ul. Generala Petrova 51 700007 TAŠKENT	1932	231	4609	325

[a] Including students attending the International Course in Public Health Administration.

United Kingdom of Great Britain and Northern Ireland

General information

In the United Kingdom of Great Britain and Northern Ireland, postgraduate training in public health is available at 7 institutions. Four of these—at Edinburgh, Glasgow, Leeds, and Manchester—are departments of medical faculties. The remaining institutions are the London School of Hygiene and Tropical Medicine, the Liverpool School of Tropical Medicine (both schools of their respective universities), and the Royal Institute of Public Health and Hygiene, London.

British universities are autonomous, self-governing foundations supported mainly through State grants with some assistance from fees and private sources. The institutions that are within universities operate under the jurisdiction of, and are financed by, the university concerned. The 4 institutions that are departments of medical faculties are headed by a professor, while the respective faculties of medicine are headed by a dean, as are the London School of Hygiene and Tropical Medicine and the Liverpool School of Tropical Medicine. In some instances, the chief executive has a double appointment as the medical officer of health of the county district in which the institution is located. The Royal Institute of Public Health and Hygiene is a self-governing institution, privately owned and financed. It is administered by a postgraduate medical board and is headed by an executive director.

The academic year begins in September or October and ends in May or June. Some courses at Liverpool begin in January or April. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.); the course is offered at the institution in Glasgow, where it lasts 9 months, and, until the end of 1985, at the Royal Institute of Public Health and Hygiene, London.

(2) Master of Public Health (M.P.H.); the course lasts for 9 months and is offered at the institution in Leeds.

(3) Master of Science (M.Sc.) in Community Medicine; the course is offered at Edinburgh, Glasgow, and Manchester and at the London School of Hygiene and Tropical Medicine; it lasts from 12 to 18 months full time or 24 to 36 months part time, depending on the institution. At Edinburgh, candidates who have successfully completed the course work and the examinations but have not presented a dissertation are awarded the Diploma in Community Medicine.

(4) Master of Community Health (M.Comm.H.); the course lasts for 12 months.

(5) Certificate in Tropical Community Medicine and Health; the course, which is for non-physicians, lasts for 3 months and is given twice a year starting in January and September.

(6) Course in Teacher Training in Primary Health Care; the course, for experienced teachers of non-professional health personnel, lasts for 3 months and begins in April.

Courses (4)–(6) are offered at the Department of International Community Health, Liverpool School of Tropical Medicine. All 3 are intended specifically for students from, or intending to work in, developing countries.

(7) Diploma in Tropical Medicine and Hygiene; the course lasts for 3 months and is organized twice a year at the Department of Tropical Medicine, Liverpool School of Tropical Medicine.

(8) Diploma in Tropical Child Health (D.T.C.H.); the course lasts for 18 months and is organized at the Department of Tropical Paediatrics, Liverpool School of Tropical Medicine.

(9) Master of Science (M.Sc.) in Community Health in Developing Countries.

(10) Master of Science in Clinical Tropical Medicine.

(11) Master of Science in Epidemiology.

(12) Master of Science in Medical Demography.

(13) Master of Science in Medical Microbiology.

(14) Master of Science in Medical Statistics.

(15) Master of Science in Occupational Hygiene.

(16) Master of Science in Occupational Medicine.

(17) Diploma in Community Health of the Tropics.

(18) Master of Science in Medical Parasitology.

(19) Diploma in Human Nutrition.

(20) Diploma in Industrial Health.

(21) Diploma in Medical Demography.

(22) Master of Science in Human Nutrition.

(23) Diploma in Tropical Medicine and Hygiene.

Courses (9)-(23) are offered at the London School of Hygiene and Tropical Medicine.

Courses (9)-(17) last for 12 months, (18)-(21) for 9 months, (22) for 15 to 18 months, and (23) for 5 months. The Diploma in Industrial Health (20) may be taken in 3 months by specially qualified students. Some of the 12-month M.Sc. courses may be taken part time in 24 months.

(24) Certificate in Health Visiting; the course lasts for 12 months and is offered at Leeds.

The Nuffield Centre for Health Sciences, University of Leeds was to introduce in 1984 a Master of Public Health for Warm Climate Countries course.

Various other training activities are undertaken, such as postgraduate courses in other subjects, undergraduate courses, refresher courses, and divers short courses.

The following paragraphs relate particularly to the D.P.H., M.P.H., M.Sc., in Community Medicine, M.Comm.H., and M.Sc. in Community Health in Developing Countries courses.

Conditions of admission

The basic admission requirements are a medical qualification registrable in the United Kingdom or, for the intitutions in Edinburgh, Glasgow, and Manchester, a university degree in a related subject. Sufficient and appropriate professional experience is also required. The Liverpool School of Tropical Medicine admits to its M.Comm.H. course holders of a university degree, with at least 2 years of field experience in a developing country, and also non-graduates with 5 years of professional training and 3 years of appropriate field experience. At the London School of Hygiene and Tropical Medicine only physicians are admitted to the M.Sc. in Community Medicine course, while both physicians and graduates in related subjects, with relevant work experience, are admitted to the M.Sc. in Community Health in Developing Countries course.

There is no age limit for admission or formal entrance examination at any of the institutions, and no medical examination, except at Glasgow. Foreign students are required to take a language proficiency test, except at Leeds and Manchester. The applicants' previous experience and references are evaluated and in some cases they are interviewed.

Tuition fees are charged; for the academic year 1979–1980 they varied from £1000 to £2310 for national students and from £1000 to £5000 for foreign students. At the Liverpool School of Tropical Medicine the fees include some of the expenses in connection with an obligatory period of 3 months' field research in a developing country and applicants must provide evidence of adequate financial support before commencing a course.

Curriculum

All the institutions have a mechanism for revising the curricula. This may be done informally by the head of the department and members of the teaching staff, as is the case at Leeds and the Liverpool School of Tropical Medicine, or there may exist a committee composed of members of the teaching staff and the dean of the medical faculty or school, and representatives of the academic council of the school or the postgraduate medical board. Curriculum changes may have to be approved by a higher authority, such as the higher degrees committee or the academic council. At Manchester representatives of the student body sit on the committee for the M.Sc. in Community Medicine course curriculum.

At 3 institutions—Glasgow, the Liverpool School of Tropical Medicine, and the Royal Institute of Public Health and Hygiene, London—the curricula relate to the tasks the students should be able to perform at the end of their studies. This is ensured by means of consultations with former students, participation in community-based projects, and field research in the setting in which the student will work after graduation. All the subjects studied during the M.P.H. course at Leeds and the M.Sc. in Community Medicine course at the London School of Hygiene and Tropical Medicine are compulsory, whereas in the D.P.H., the M.Comm.H., the M.Sc. in Community Health in Developing Countries, and the other M.Sc. in Community Medicine courses, in addition to the compulsory subjects, a varying number of elective subjects is permitted. The number of hours of instruction varies from 300 to 1250, depending on the course and the institution.

Lectures, seminars, and workshops are the commonest methods of instruction; simulation and role-playing are very little used. All the institutions, except that at Manchester, use self-instructional material, and all, except those at Leeds and Edinburgh, make extensive use of either field practice or field visits, or both in some cases.

The Liverpool School of Tropical Medicine makes collaborative arrangements with universities in developing countries in different parts of the world for the students to be grouped into interdisciplinary teams and placed in a suitable underpriveleged area, where they carry out field research under the supervision of staff of the collaborating institution. This period is considered of central importance to the course.

At Manchester the students follow academic studies part time and work during the rest of the time, mainly in field situations. Seminars, symposia, and teaching sessions, which involve health service personnel, are arranged, to discuss practical issues and problems arising from the work experience of the students. The seminars are in addition to the hours of formal instruction on specific subjects and take up a considerable proportion of the curriculum, which is becoming increasingly integrated.

At Edinburgh the students follow formal courses of instruction for 2 terms; the third is spent on class and individual projects related to the subjects of study. The examinations are held in June, after which candidates for the M.Sc. spend a further 3 months preparing a dissertation. Those who do not present a dissertation are awarded the Diploma in Community Medicine.

The management of health services based on primary health care is taught at Edinburgh, Glasgow, the Liverpool School of Tropical Medicine, and the London School of Hygiene and Tropical Medicine.

Assessment of students

Some of the courses of instruction at Manchester and Glasgow and all of the courses at the Liverpool School of Tropical Medicine include informal assessment which provides the students with information on their progress.

Formal intermediate examinations are held only at Glasgow. The final examinations are both written and oral at all the institutions and are conducted by internal and external examiners, in some cases before a special board of examiners. Some of the institutions include the observation of students in class and in the field, projects, and problem-solving exercises among their methods of assessment. The London School of Hygiene and Tropical Medicine, the Royal Institute of Public Health and Hygiene, and the institution in Glasgow require a satisfactory record of attendance, and all the institutions require the presentation and satisfactory defence of a thesis.

Qualification

Successful candidates are awarded the Diploma in Public Health, or the degree of Master of Public Health, Master of Science in Community Medicine, or Master of Science in Community Health in Developing Countries. These qualifications are accepted for registration with the General Medical Council. In the United Kingdom, a postgraduate qualification in public health is not required by law but is highly desirable for the incumbents of senior medical posts with central or local government having responsibility for public health and management.

The Master of Community Health degree awarded by the Liverpool School of Tropical Medicine is not accepted for registration with the General Medical Council for posts in the National Health Service of the

United Kingdom. Such registration has not been requested, since graduates are expected to work in developing countries.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
ENGLAND AND WALES				
Department of Community Medicine and General Practice (G, S) School of Medicine University of Leeds 32 Hyde Terrace LEEDS LS2 9LN	1884	11 ft 2 pt	. .	N: 5 (3 m; 2 f) F: 2 m
Department of International Community Health (S) Liverpool School of Tropical Medicine Pembroke Place LIVERPOOL L3 5QA	1973[a]	8 ft 4 pt	N: 28 (14 m; 14 f) F: 137 (91 m; 46 f)	N: 4 (2 m; 2 f) F: 22 (11 m; 11 f)
London School of Hygiene and Tropical Medicine (G, I, S) University of London Keppel Street LONDON WC1E 7HT	1929	105 ft 90 pt	N: 810 (433 m; 377 f) F: 410 (275 m; 135 f)	N: 14[b] (7 m; 7 f) F: 39[b] (30 m; 9 f)
The Royal Institute of Public Health and Hygiene 28 Portland Place LONDON W1N 4DE	1905	1 pt[c]	. .	F: 15 (13 m; 2 f)
Department of Community Medicine University of Manchester Clinical Sciences Building York Place MANCHESTER M13 0JJ	1952[d]	5 ft 36 pt	. .	N: 23 (8 m; 15 f) F: 6 (5 m; 1 f)
SCOTLAND				
Department of Community Medicine (I, S) University of Edinburgh Usher Institute Warrender Park Road EDINBURGH EH9 1DW	1875	14 ft[c]	. .	N: 4 (2 m; 2 f) F: 8 (5 m; 3 f)
Department of Community Medicine (S) University of Glasgow Ruchill Hospital Bilsland Drive GLASGOW G20 9NB	1890	11 ft 5 pt	. .	. .

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[a] A diploma in tropical medicine course was first established in 1904 at the Liverpool School of Tropical Diseases, later renamed the Liverpool School of Tropical Medicine. The Certificate in Tropical Community Medicine and Health course was instituted in 1973, and the Master of Community Health course in 1975. The figures for staff and students apply to the Department of International Community Health only, and not the entire institution. A 3-month diploma in tropical medicine and hygiene course is organized by the *Department of Tropical Medicine*, and an 18-month diploma in tropical child health course by the *Department of Tropical Paediatrics*.

[b] Figures for the M.Sc. in Community Medicine and M.Sc. in Community Health in Developing Countries courses.

[c] A large number of visiting lecturers are not regarded as members of the staff.

[d] A public health course has been given at the University of Manchester since 1892, until 1952 at the Department of Bacteriology.

United Republic of Tanzania

General information

In the United Republic of Tanzania, postgraduate training in public health is available at the Faculty of Medicine, University of Dar es Salaam. The University came into existence in July 1970 when the University of East Africa was dissolved and its 3 components became independent universities (University of Makerere, Uganda, University of Nairobi, Kenya, and University of Dar es Salaam, Tanzania). In 1977 the Muhimbili Medical Centre was established. It is an autonomous body managed by a board of trustees and headed by a director-general under the jurisdiction of, and funded by, the Ministry of Health. The aim of the Centre is to provide health services to the people of Dar es Salaam and the surrounding regions and consultant services to the whole of the country, to train health personnel at various levels, and to conduct research appropriate to an institution of higher education. The Faculty of Medicine of the University of Dar es Salaam, which is headed by a dean, is incorporated within the Centre.

The academic year begins in July and ends in June. The language of instruction is English.

Courses offered

The following courses are organized:

(1) Diploma in Public Health (D.P.H.); the course lasts for 1 calendar year.

(2) Master of Medicine (M.Med.); the course, which is an in-service training course, lasts for 3 years. Students may specialize in a number of disciplines one of which is community medicine.

Conditions of admission

Applicants for both courses must hold a basic degree in medicine and have had 2 years of professional practice, 1 year in an approved internship and 1 year in an approved hospital appointment preferably at an up-country station. There is no entrance examination, no language proficiency examination, and no age limit for admission. Applicants must satisfy health requirements. Foreign students are eligible for admission. A tuition fee is charged; for the academic year 1979–1980 it was Sh. 30 455.

Curriculum

A curriculum committee consists of the Associate Dean of the Faculty and representatives of the Departments of Behavioural Sciences, Epidemiology and Biostatistics, and Community Health. Students in the D.P.H. course study compulsory subjects for a total of 655 hours. The course is divided into 4 modules: epidemiology and biostatistics, community health, the behavioural sciences, and parasitic and environmental sanitation. Students also carry out field studies and write a dissertation.

The programme for the M.Med. (Community Medicine) course requires 1 year of academic study, which consists of attendance at 4 core courses of instruction, one of which is in community medicine, followed by 2 years in a full-time approved appointment which provides experience relevant to the practice of community medicine in East Africa. A dissertation is written during the second of the 2 years of practice.

Lectures, seminars, workshops, field visits, and field practice are the most important methods of instruction. Problem-solving, simulation, and role-playing are used to a lesser extent. The institution has a rural field training centre under its direct control and also makes arrangements with district hospitals and rural health centres for the practical training of its students.

The management of health services based on primary health care is taught.

Assessment of students

The examinations consist of written, oral, and practical tests, and include the observation of students in class and in the field. There is also an examination to be done at home—an essay on a specific community health problem which students are given a week to write. The students must undertake field studies and present a satisfactory dissertation. Students in the M.Med. (Community Medicine) course are required to pass an intermediate examination at the end of the first year. The final examination is conducted by a special committee consisting of internal and external examiners.

Qualification

The Diploma in Public Health and the Master of Medicine (Community Medicine) are awarded to candidates who have fulfilled the necessary attendance requirements, passed the examinations (with a mark of not less than 50% in the case of the D.P.H.), and presented a dissertation and defended it satisfactorily. In Tanzania, a postgraduate qualification in public health is a requirement for appointments to the posts of regional medical officer and public health specialist, and for senior faculty teaching public health at the University.

		Academic year 1979–1980		
Name and address	*Year public health course started*	*No. of teaching staff*	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*
Faculty of Medicine University of Dar es Salaam P.O. Box 65001 Dar es Salaam	1974	21 ft 4 pt	N: 5 (4 m; 1 f)	N: 5 (4 m; 1 f)

United States of America

General information

In the United States of America (including the Commonwealth of Puerto Rico), postgraduate training in public health is available at 23 institutions accredited by the American Public Health Association.

All the institutions are within universities. All, except those at Yale University and Boston University, are independent units, their chief executive officer, the dean, being responsible to the president of the university, the vice-president of health affairs, or a similar central university authority. In the case of the institution at Boston University, its chief executive officer, the Director, is responsible to the Dean of the Medical School. The institution at Yale University is part of the University Medical School, functioning as its department of epidemiology and public health. The chief executive officer of the department—the Chairman—is responsible to the Dean of the Medical School. While their teaching and research programmes are the responsibility of a full-time faculty, the institutions can usually draw on the professional resources of other university units, as well as on the services of experts from outside the university.

Fifteen of the universities concerned are owned and financed by individual states (or the commonwealth in the case of Puerto Rico) and the remainder by private, non-profit corporations or organizations. Financial support for the second category comes from such sources as tuition fees, private foundations, endowments, and donations. The state-owned institutions are financed to a large extent by local public funds. The United States Public Health Service finances teaching and research facilities and special training projects at all the institutions, with the exception of that at the University of Texas, which is mainly supported by the state and, to a lesser extent, by grants from public funds and private foundations.

The institutions engage in a variety of activities. They offer training opportunities for individuals from varied backgrounds who are to serve as professionals in public health endeavours, including community practice, academic teaching, and research. The courses organized cater not only for the needs of the medical profession but also for those of the other professions forming the health team. Over half the institutions also provide instruction for undergraduate students.

The institutions have extensive programmes of basic and applied research in many fields—e.g., epidemiology, biostatistics, environmental health, occupational safety and health, the biomedical sciences, nutrition, health education, population studies, tropical medicine, family health, and the behavioural and social sciences—and in the development of effective methods for the application of knowledge in the community, both at home and abroad. Increasing emphasis has been given to training in the management and administration of health services.

Because of their geographical position and the nature of the local populations, the institutions at Hawaii and Puerto Rico have initiated and developed programmes relating to conditions of their own, different from those of the continental USA. The training facilities at Puerto Rico serve some of the institutions in the continental USA.

Each institution is organized into departments or major units with one or more full-time professor to each unit. To coordinate work, there is a professor-chairman of each department, or a chairman of a group of related departments.

In addition to the 23 institutions mentioned above, a number of departments of community health and preventive medicine within faculties of medicine also offer postgraduate courses in public health.

The academic year begins in August or September and ends in May or June. Some of the institutions offer summer instruction. The language of instruction is English, except at the institution in Puerto Rico where it is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.) given at all the institutions. The length of time required to complete the course depends on the programme and the student's educational background and work experience. However, 9 months of approved study are generally regarded as the minimum. Over half the institutions allow workers in the health field to follow the course part time over a longer period of time, while continuing to work.

Most of the institutions offer programmes in which the M.P.H. course can be combined with another degree course. The most common combination is with a Doctor of Medicine (M.D.) course but, in at least one institution, it can be combined with a course leading to Doctor of Dental Surgery (or Services) (D.D.S.), Doctor of Optometry (O.D.), Doctor of Dental Medicine (or Medical Dentistry) (D.M.D.), Doctor of Veterinary Medicine (D.V.M.), Master of Social Welfare (or Work) (M.S.W.), Master of Business Administration (M.B.A.), Doctor of Jurisprudence (J.D.), Master of Arts (M.A.) in Public Affairs, Master in Public Health Planning, Master of Science (M.Sc.) or Master of Nursing (M.N.), Master in Management Studies, Master of Arts in Latin American Studies, Master of Urban Planning, or Master of International Affairs.

(2) Master of Science in Public Health (M.S.P.H.); the course lasts from 15 to 24 months and is offered at Alabama, the University of California at Los Angeles, Illinois, Loma Linda University (California), North Carolina, South Carolina, Tulane University (Louisiana), and Johns Hopkins University (Maryland).

(3) Master of Science (M.S., S.M., or Sc.M.); the course lasts from 15 to 24 months and is offered at the University of California at Berkeley, the University of California at Los Angeles, Harvard University (Massachusetts), Hawaii, Johns Hopkins University (Maryland), Columbia University (New York), Massachusetts, Michigan, Minnesota, North Carolina, Texas, and the University of Washington.

(4) The following specific degrees in various areas of concentration are offered by at least one of the institutions:

(*a*) Master of Science in Hygiene; the course is offered at the University of Pittsburgh (Pennsylvania).

(*b*) Master of Hospital Administration; the course is offered at Minnesota.

(*c*) Master of Health Administration; the course is offered at the University of Washington and Loma Linda University (California).

(*d*) Master of Health Services Administration; the course is offered at Michigan, Puerto Rico, and the University of Washington.

(*e*) Master of Health Science; the course is offered at Johns Hopkins University (Maryland).

(*f*) Master of Public Health and Tropical Medicine; the course is offered at Tulane University (Louisiana).

(*g*) Master of Arts; the course is offered at the University of California at Berkeley.

(*h*) Master of Occupational Health; the course is offered at Harvard University (Massachusetts).

(*i*) Master of Science in Biostatistics; the course is offered at the University of California at Los Angeles.

(*j*) Master of Science in Environmental Engineering; the course is offered at North Carolina.

(*k*) Master of Science in Epidemiology; the course is offered at Columbia University (New York).

(*l*) Master in Demography.

(*m*) Master in Health Education.

(*n*) Master in Evaluation Research of Health Systems.

(*o*) Master in Environmental Health.

(*p*) Master in Nutrition.

Courses (*l*)–(*p*) are offered at Puerto Rico.

(5) The following advanced degrees—i.e., beyond the degree of Master—for which a research thesis must be presented, are awarded by a number of the institutions:

(*a*) Doctor of Public Health (Dr P.H.); requiring 24–60 months and available at Alabama, the University of California at Berkeley, the University of California at Los Angeles, Columbia University (New York), Harvard University (Massachusetts), Hawaii, Illinois, Johns Hopkins University (Maryland), Loma Linda University (California), Michigan, North Carolina, Oklahoma, the University of Pittsburgh (Pennsylvania), South Carolina, Texas, Tulane University (Louisiana), and Yale University (Connecticut).

(*b*) Doctor of Health Science (Dr H.Sc.); the course lasts for 24 months and is offered at Loma Linda University (California).

(*c*) Doctor of Science (Sc.D.); offered at Johns Hopkins University (Maryland), Harvard University (Massachusetts), and Tulane University (Louisiana).

(*d*) Doctor of Science in Hygiene (Sc.D.Hyg.); offered at the University of Pittsburgh (Pennsylvania).

(*e*) Doctor of Philosophy (Ph.D.); available to research workers in various fields through the university graduate schools at Hawaii, Illinois, the University of California at Berkeley, the University of California at Los Angeles, Johns Hopkins University (Maryland), Massachusetts, Michigan, Minnesota, North Carolina, Oklahoma, the University of Pittsburgh (Pennsylvania), South Carolina, Texas, the University of Washington, Columbia University (New York), and Yale University (Connecticut). For a Ph.D. in public health instruction is carried out by members of the departments providing postgraduate training in public health.

(*f*) A postdoctoral fellowship programme in dental public health and dental care administration is offered at the Harvard School of Dental Medicine in cooperation with the Harvard School of Public Health and the Massachusetts Department of Public Health. The programme covers 3 academic years and is intended to prepare a limited number of individuals for full-time teaching, research, and/or administrative careers in dental public health and dental care organization.

(6) Bachelor of Science in Public Health; the course occupies the last 2 years of a 4-year college programme and is offered at the University of California at Los Angeles, North Carolina, Massachusetts, and the University of Washington.

The University of Hawaii offers a general preventive medicine residency programme with specializations in international health, family planning, population dynamics, and epidemiology.

Conditions of admission

There is no age limit for admission. Applicants for the M.P.H. degree programme should possess:

(1) a bachelor's degree or the equivalent—e.g., a nursing degree—from an institution of acceptable standing, with substantial knowledge in a discipline relevant to public health, either through study, or experience, or a combination of the two.

(2) a graduate—professional—degree or the equivalent from an institution of acceptable standing in a discipline relevant to public health.

Some of the institutions prefer applicants to have a solid grounding in the natural sciences, such as biology, chemistry, physiology, or microbiology and in the social sciences, such as sociology, psychology, anthropology, political science, or economics, or a combination thereof.

Applicants with degrees in medicine, dentistry, or veterinary medicine, or with doctoral degrees representing a similar depth of preparation usually readily meet the above criteria. Those with a master's degree in an area related to public health, and those with a bachelor's degree complemented by relevant work experience, may also qualify for admission.

In addition, applicants must present an above-average academic record from their previous undergraduate and graduate studies. Applicants who hold only a bachelor's degree must sit for the Graduate Record Examination. Applicants whose mother tongue is not English must take the Test of English as a Foreign Language (TOEFL) of the Educational Testing Service, Princeton, NJ, or an equivalent examination. At Puerto Rico applicants must have a fluent command of the Spanish language and be able to read and understand English. At some institutions a medical examination is required. Personal interviews or letters of recommendation are admission requirements in some instances.

For admission to the Dr P.H. degree programme applicants must be in possession of the M.P.H. or a master's degree in a relevant health field.

Foreign students are eligible for admission under the same conditions as national students. Prior to admission they must provide proof of financial support.

Tuition fees are charged; for the academic year 1981–1982 they varied from about US$ 99 to US$ 7030 for national students resident in the state, and from about US$ 960 to US$ 7030 for non-residents and foreign students. A limited amount of financial assistance, in the form of United States Government traineeships (full or partial), fellowships, or grants-in-aid from university funds and other public or private sources, is available for national students at all the institutions. Foreign students must seek financial support on their own initiative or through various kinds of fellowship.

Curriculum

Programmes leading to the M.P.H. degree are designed to train personnel for professional service in the field of public health at local, national, or international levels. The design and revision of the curricula are, in general, the responsibility of a body within each institution—such as the curriculum, educational policy, academic affairs, or academic programme committee—composed of representatives from each department, with the dean, assistant dean, or associate dean as chairman. At a number of institutions the student body is also represented.

In response to the changing public health environment and the resulting specialized needs of students and employers, the curricula encompass an ever-widening spectrum of educational experience; as many as 130 subjects may be offered, covering various fields of public health importance.

The curricula for the M.P.H. courses are not identical at all institutions, nor are they rigid for all the students at one institution. They are structured to accommodate a diversity of backgrounds and future assignments. An institution may be known for the particular attention it gives to one or more public health subject. The educational objectives of each institution are identified by the members of its staff. An adviser is appointed to guide each student embarking on a master's degree programme in the selection of appropriate subjects.

The curriculum may be roughly divided into 2 groups of subjects. One group includes the subjects that are basic to public health work of any kind in any special field. These core subjects ordinarily represent less than half the total number of credit units required for the degree.[1] The second group includes elective subjects pertaining to a particular student's major interest. Through the elective subjects they choose, students acquire a wider knowledge of and/or pursue in depth one or more areas of particular relevance to their career goals. On completion of their programmes the students should have acquired extensive knowledge in certain essential areas, which is not necessarily acquired if they are obliged to study specific subjects. They are, therefore, encouraged to seek exemption in areas in which they possess sufficient skills and knowledge, so that they may take a wider range of subjects and exercise greater flexibility in planning their curricula. At some institutions there are no required subjects; each student has an individual study plan and may study a subject anywhere in the university.

The management of health services based on primary health care is taught in various courses of instruction, such as health and medical care organization or administration, hospital administration, health services organization or administration, the administration of public health, or health policy and management.

Students may also be required to complete periods of field training, the nature and scope of which are approved in advance by their programme committees, to which brief reports on the experience gained are usually submitted. All the institutions have cooperative arrangements with various urban and rural health centres and community health care facilities. In certain cases these facilities are quite distant from the institution, sometimes even in other countries. For example, the institution at Hawaii has developed an exchange programme with the two University of California institutions, at Los Angeles and Berkeley; and its formal relationships with institutions in Guam, Indonesia, the Philippines, and

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[1] Students are required to accumulate a specified number of the credit units given for attendance at each course of instruction. The number of hours of lectures, seminars, laboratory work, or field work that each unit represents varies.

Thailand provide opportunities for faculty and student exchange, extended training, and research.

Assessment of students

Methods of assessment vary from institution to institution. The performance of the students is evaluated during the courses by their programme advisers and instructors. Such evaluation may consist of oral and written tests, problem-solving exercises, the assessment of field and/or laboratory work, or the observation of participation in class. A comprehensive final examination may be held.

Qualification

In order to obtain the Master of Public Health degree candidates must have: (1) completed the required period of full-time residency at the institution; (2) successfully completed the approved schedule of studies, including the required courses of instruction, field research, or laboratory work; (3) passed a final comprehensive examination conducted by an examinations committee; and in some cases, (4) presented a report or essay, the subject of which has been planned in advance with the programme committee.

The professional degree of Master of Public Health is granted by the institution and conferred by the university.

Each state in the United States of America is autonomous in deciding whether possession of the M.P.H. degree should be a requirement for employment in the health services. In some states all local public health units are staffed by persons holding the M.P.H. degree (or equivalent); in others the M.P.H. is required for appointment to a senior administrative position. In yet others there is no legal requirement, but possession of the M.P.H. is desirable for appointment as a city or county health officer or a health educator, to a teaching post, and for administrative personnel in public health programmes in state and local departments of health.

Name and address	*Year public health course started*[a]	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic postgraduate public health degree/diploma course(s)*
ALABAMA				
School of Public Health University of Alabama in Birmingham The Medical Center University Station BIRMINGHAM 35294	1966	29 ft 5 pt	N: 152 (81 m; 71 f) F: 13 (8 m; 5 f)	..
CALIFORNIA				
School of Public Health University of California at Berkeley 19 Earl Warren Hall BERKELEY 94720	1911	52 ft 36 pt	N: 426 (154 m; 272 f) F: 38 (17 m; 21 f)	..

Name and address	Year public health course started[a]	Academic year 1981–1982		
		No. of teaching staff	No. of students in all courses	No. of students in the basic postgraduate public health degree/diploma course(s)
School of Health (G, I, S) Loma Linda University LOMA LINDA 92350	1948	37 ft 9 pt	N: 430 (191 m; 239 f) F: 274 (186 m; 88 f)	. .
School of Public Health University of California at Los Angeles Center for Health Sciences LOS ANGELES 90024	1944	58 ft 6 pt	N: 536[b] (177 m; 359 f) F: 44 (21 m; 23 f)	. .
Graduate School of Public Health San Diego State University SAN DIEGO 92182	1981	17 ft 7 pt	N: 89[c] (40 m; 49 f) F: 16 (10 m; 6 f)	. .
CONNECTICUT				
Department of Epidemiology and Public Health (G, I, S) Yale University School of Medicine 60 College Street P.O. Box 3333 NEW HAVEN 06510	1915	44 ft 99 pt	N: 275 (86 m; 189 f) F: 12 (10 m; 2 f)	. .
HAWAII				
School of Public Health (G, I, S) University of Hawaii 1960 East-West Road HONOLULU 96822	1962	35 ft[d] 29 pt	N: 295 (104 m; 191 f) F: 43 (29 m; 14 f)	. .
ILLINOIS				
School of Public Health University of Illinois at Chicago Medical Center P.O. Box 6998 CHICAGO 60680	1972	72 ft 25 pt	N: 201 (76 m; 125 f) F: 15 (7 m; 8 f)	. .
LOUISIANA				
School of Public Health and Tropical Medicine (G, I, S) Tulane University 1430 Tulane Avenue NEW ORLEANS 70112	1915	50 ft 125 pt	N: 251 (98 m; 153 f) F: 138 (115 m; 23 f)	. .
MARYLAND				
School of Hygiene and Public Health (G, I, S) Johns Hopkins University 615 North Wolfe Street BALTIMORE 21205	1916	219 ft 174 pt	N: 592 (250 m; 342 f) F: 242 (143 m; 99 f)	. .
MASSACHUSETTS				
Division of Public Health School of Health Sciences University of Massachusetts at Amherst AMHERST 01003	1947	20 ft 2 pt	N: 90 (34 m; 56 f) F: 5 (4 m; 1 f)	. .

Name and address	*Year public health course started*[a]	*Academic year 1981–1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic postgraduate public health degree/diploma course(s)*
MASSACHUSETTS (*continued*)				
School of Public Health **Boston University** **80 East Concord Street, A310** **BOSTON 02118**	1976	20 ft 63 pt	N: 228 (57 m; 171 f) F: 9 (5 m; 4 f)	. .
School of Public Health (G, I, S) **Harvard University** **677 Huntington Avenue** **BOSTON 02115**	1922	147 ft 42 pt	N: 317 (163 m; 154 f) F: 86 (57 m; 29 f)	. .
MICHIGAN				
School of Public Health (G) **University of Michigan** **109 South Observatory Street** **ANN ARBOR 48109**	1941	92 ft 29 pt	N: 670 (291 m; 379 f) F: 72 (50 m; 22 f)	. .
MINNESOTA				
School of Public Health (G, I, S) **University of Minnesota** **1360 Mayo Memorial Bdg, Box 197** **420 Delaware Street S.E.** **MINNEAPOLIS 55455**	1922	120 ft 33 pt	N: 415 (156 m; 259 f) F: 33 (22 m, 11 f)	. .
NEW YORK				
School of Public Health **Columbia University** **600 West 168th Street** **NEW YORK 10032**	1921	82 ft	445	. .
NORTH CAROLINA				
School of Public Health **University of North Carolina** **Rosenau Hall 201-H** **CHAPEL HILL 27514**	1939	150 ft 12 pt	N: 648[c] (262 m; 386 f) F: 64 (32 m; 32 f)	. .
OKLAHOMA				
College of Public Health (G, I, S) **University of Oklahoma** **Health Sciences Center** **P.O. Box 26901** **OKLAHOMA CITY 73190**	1968	23 ft 4 pt	N: 190 (99 m; 91 f) F: 35 (26 m, 9 f)	. .
PENNSYLVANIA				
Graduate School of Public Health **University of Pittsburgh** **111 Parran Hall** **PITTSBURGH 15261**	1950	84 ft 14 pt	N: 463 (204 m; 259 f) F: 37 (25 m; 12 f)	. .
SOUTH CAROLINA				
School of Public Health **Univeristy of South Carolina** **COLUMBIA 29208**	1974	35 ft[d] 8 pt	N: 168 (86 m; 82 f) F: 7 (6 m; 1 f)	. . .

Name and address	*Year public health course started*[a]	*Academic year 1981-1982*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
TEXAS				
School of Public Health **University of Texas Health Science Center at Houston** **P.O. Box 20186** **HOUSTON 77025**	1969	50 ft 4 pt	N: 498 (197 m; 301 f) F: 78 (52 m; 26 f)	..
WASHINGTON				
School of Public Health and Community Medicine **University of Washington** **SC-30** **SEATTLE 98195**	1949	100 ft 30 pt	N: 290 (163 m; 127 f) F: 31 (18 m; 13 f)	..
PUERTO RICO				
Facultad de Ciencias Biosociales y Escuela Graduada de Salud Pública (G, I, S) **Recinto Ciencias Médicas** **Universidad de Puerto Rico** **G.P.O. Box 5067** **SAN JUAN 00936**	1941	50 ft 4 pt	N: 130 (45 m; 85 f) F: 10 (8 m; 2 f)	..

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[a] Year in which the first pubic health course was introduced, a number of the institutions were established or accredited at a later data.

[b] Includes 41 undergraduates.

[c] 1982-1983 figures.

[d] Numerous other lecturers and clinical faculty teach in the courses.

Venezuela

General information

In Venezuela, postgraduate training in public health is available at the School of Public Health, one of a number of postgraduate schools in the country, which is part of the Faculty of Medicine of the State-owned Central University of Venezuela, Caracas. The institution is financed by the Ministry of Health and Social Welfare which provides its teaching staff. The chief executive officer is the Director, who is appointed by the University in agreement with the Ministry of Health and Social Welfare. There is a council, composed of the Director, heads of departments, 2 additional professors, and 2 students.

The institution's functions are to: (1) train professional and technical health personnel at different levels in the field of public health; (2) carry out research on public health problems; (3) carry out research on the teaching of public health; (4) assess the work of health-related institutions.

The academic year begins in January and ends in December. The language of instruction is Spanish.

Courses offered

The following courses are organized:

(1) Master of Public Health (M.P.H.); the course lasts for 1 year. Students may specialize in one of the following subjects: health administration, hospital administration, epidemiology, health education, or nutrition.

(2) Diploma in Epidemiology; the course lasts for 1 year and is a specialization course for students who hold a diploma in public health or an equivalent qualification.

(3) Short-term advanced course in public health; the course lasts for 4 months;

(4) Advanced course in health education.

Numerous continuing education courses are organized, including a 6-month course in public health for qualified nurses, a course in hospital administration for heads of hospital departments and services, a course in administration for dieticians, and courses in veterinary public health and food hygiene.

Conditions of admission

For admission to the M.P.H. course applicants must: (1) hold a medical degree from a Venezuelan university, or a medical degree obtained abroad and recognized or validated in Venezuela (foreign applicants who are not resident in Venezuela and whose admission has been requested by a university or other institution in a neighbouring country that has guaranteed the employment of the applicant after completion of the course are exempt from the requirement that their medical degree should be validated in Venezuela); (2) have acquired 2 years' professional experience, preferably in a rural health centre, a rotating internship, or hospital residence; (3) be in good physical and mental health; (4) be accepted by the Selection Committee; and (5) formally undertake to comply with the regulations governing the course. There is no entrance examination or age limit, but applicants must pass a test of linguistic ability. Applicants for the Diploma in Epidemiology course must hold a diploma in public health or equivalent qualification. Foreign students are eligible for enrolment under the same conditions as national students but are not permitted to practise in Venezuela after completion of the course.

Tuition fees are charged. In the academic year 1979–1980, the fee for the M.P.H. course was Bol. 350 and for the other courses Bol. 70.

Scholarships are available from the Ministry of Health and Social Welfare and other agencies.

Curriculum

The curricula are designed by a curriculum committee, composed of 5 professors, and submitted to the Council and the Medical Faculty Council for approval. They relate to the tasks the students should be able to perform at the end of their training.

The M.P.H. course is divided into 3 periods each of 4 months' duration. During the first the students study core subjects, and during the second obligatory subjects determined by the area of public health in which they intend to specialize. The third period is spent on practical work in an urban or rural health centre or a community development health training area selected by the institution and made available by the Ministry of Health and Social Welfare.

Lectures, seminars, workshops, field visits, field practice, problem-solving, and simulation are the most important methods of instruction; self-instructional material and role-playing are used a little.

The short-term course in public health consists of 2 periods of combined theoretical and practical study; during the first the students study core subjects, and during the second they concentrate on one of the following subjects: hospital administration, health administration, epidemiology, nutrition, dental hygiene, or the public health aspects of dermatology.

Assessment of students

Methods of assessment consist of written, oral, and practical tests. The performance of the students in class and in the field is also observed. Students are required to present a thesis and to have a working knowledge of a language other than Spanish. The final examinations are conducted by members of the teaching staff and cover all the subjects studied.

Qualification

After having followed the M.P.H. course for the required 3 periods, completed the 44 credits specified in the course outline, the necessary field work, the language requirement and all other assignments, succeeded in the intermediate and final examinations, and presented a satisfactory thesis, candidates are awarded the degree of Master of Public Health.

In Venezuela, this qualification is required for appointment to the following posts: director or deputy director of an urban health service, director or deputy director of a hospital, director or deputy director of a health district, public health administrator in the Ministry of Health and Social Welfare, and professor at the School of Public Health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Escuela de Salud Pública (G, I, S) Complejo Hospitalario "José I. Baldó" El Algodonal Apartado de Correos 62231 Antimano CARACAS	1958	23 ft 8 pt	N: 283 (99 m; 184 f) F: 8 (7 m; 1 f)	N: 21 12 m; 9 f) F: 8 (7 m; 1 f)

Viet Nam

General information

In Viet Nam, postgraduate training in public health is available at the School of Public Health, Hanoi and at its annex in Ho Chi Minh City. The institution, which is headed by a director, is financed entirely by the State, and comes under the jurisdiction of the Ministry of Health.

All students are State employees in various branches of the public health services and the courses are specifically aimed at qualifying them for further responsibilities.

In the earlier part of the century there was a grave lack of health personnel in Viet Nam, especially in the rural areas, where 80% of the people live. To remedy this, a network of health care services was set up to cover the entire country and a system was instituted in which health personnel underwent periods of training at provincial or district level interspersed with some years of practical work in the health services. This ensured the rapid basic training of sufficient health personnel to cover the elementary health care needs of the population.

As the general level of education of the population has risen over the last 30 years (in 1945 90% of the population was illiterate) so also has the level of education of candidates for health training courses. It is still possible for a dedicated health worker to begin as a qualified nurse with 2 years of training, after 3 years of practice to undergo a further 3 years of training to qualify as a medical assistant, and after a further 5 years of practice to take 3 years of training to qualify as a physician (Doctor of Medicine). There is a parallel path to qualification as a physician which consists of 6 years of theoretical training at a medical school, including short periods of practical training in the field. A qualified medical assistant may wish to specialize in public health rather than in curative medicine. In that case he may follow a 3-year training course at the School of Public Health which will allow him to qualify as a physician with emphasis on public health (Doctor of Public Health). Doctors of Medicine and Doctors of Public Health may apply for the Specialization in Public Health course leading to a postgraduate qualification.

The academic year begins in September and ends in July. The language of instruction is Vietnamese.

Courses offered

The following courses are organized:

(1) Specialization in Public Health (first level); the course lasts for 18 months.

It is intended in the near future to offer an advanced Specialization in Public Health (second level) course, lasting for 18 months, for students who have completed the first level and gained a further 4–5 years of practical experience. This course is being planned.

(2) Course in Sociology and Organization of Health Services; the course lasts for 3 years and allows medical assistants to complete the training necessary to qualify as physicians.

Various refresher courses in public health lasting approximately 1 month are also offered.

Conditions of admission

There is no age limit for admission. Applicants for the Specialization in Public Health course must be university graduates in medicine, pharmacy, or a related health science and have had 4–5 years of experience in the public health field. Applicants for the Course in Sociology and Organization of Health Services must have obtained the Diploma of Medical Assistant. An entrance examination is held and a medical examination is obligatory but there is no test of linguistic ability. All the training is free of charge and the students continue to receive their usual salaries for the duration of their studies. Foreign students are eligible for admission.

Curriculum

A scientific and educational committee is responsible for the curriculum which is subject to the approval of the Minister of Health.

All the subjects are compulsory, with a total of 1360 hours of instruction. Lectures, field visits, and practical exercises are the most important teaching methods; seminars and workshops are also used. The practical training of students is considered to be of prime importance and the institution makes the necessary arrangements with urban and rural health centres and with community health centres.

Assessment of students

All the courses include formative assessment which provides the students with information on their progress. Oral and practical examinations are held during and at the end of the course and the performance of the students is observed in class and during field visits. Regular attendance is obligatory and students following both the Specialization in Public Health Course and the Course in Sociology and Organization of Health Services are required to present a thesis.

Qualification

Having completed the course of study and passed the requisite examinations the candidate is awarded the diploma of Specialist in Public Health (first level). It is essential to possess this diploma for appointment to the posts of head of a district health centre, hospital administrator, provincial public health administrator, or public health specialist in the Ministry of Health.

Candidates who have completed the Course in Sociology and Organization of Health Services are awarded the diploma of Doctor of Public Health. This diploma qualifies the candidate as a physician with emphasis on public health.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course(s)*
Trủông Cán bộ Quẩn Lý Y Tế (School of Public Health) 138 Giañg Vỏ Street HANOI	1976[a]	34 ft 20 pt[b]	300[c]	N: 49 (31 m; 18 f)

[a] The course began in 1960 at the Department of Organization of Health Services, University of Hanoi, and from 1976 was continued at the School of Public Health.

[b] Part-time teachers, nominated by the Ministry of Health, are called on as required.

[c] Approximate figure, consisting of approximately 70% men and 30% women; figures for short refresher courses are not included.

Yugoslavia

General information

In Yugoslavia, postgraduate training in public health is available at the Postgraduate Medical Institute, Belgrade and the "Andrija Štampar" School of Public Health, Zagreb.

The Postgraduate Medical Institute is a self-governing establishment operating under the jurisdiction of the Executive Council of the Government of the Republic of Serbia, and the Health Ministry of the Republic. Its courses are being completely reorganized and further details are not, therefore, currently available.

The "Andrija Štampar" School of Public Health is part of the Medical Faculty, University of Zagreb. It is under the jurisdiction of the Republican Committee for Education, Culture and Physical Education, and is administered by the Faculty Board. The chief executive officer is the Director. The institution is financed from various sources: from self-managing communities of providers and users of the services; from local authority grants and other public funds; and, to a certain extent, from national Government funds. In addition to postgraduate training, the institution is responsible for the training of undergraduates in all areas of public health. The academic year begins in October and ends in July. The language of instruction is Croatian; certain special courses are given in English.

Courses offered

The following courses are organized at the "Andrija Štampar" School of Public Health:

(1) Diploma in Public Health and Epidemiology.
(2) Diploma in General Practice.
(3) Diploma in Occupational Health.
(4) Diploma in Medical Microbiology.
(5) Diploma in School Hygiene and School Medicine.
(6) Diploma in Maternal and Child Care.
(7) Diploma in Health Ecology.

All the courses last for 10 months.

Students may continue their studies for a further year to qualify for a master's degree in any of the above fields. In addition, specialization courses in the same fields are organized. The period of specialization lasts for 3 years, the first year constituting the diploma course, followed by 2 years of in-service training.

Conditions of admission

Applicants must be graduates in medicine or a health-related science. There is no age limit for admission, no entrance examination, and no medical examination, but applicants are required to take a language proficiency examination. Preference is given to applicants employed in the health services and related sectors. Foreign students are admitted if they are proficient in the language of instruction.

A tuition fee is charged. In the academic year 1979–1980 the fee for each course was Y.Din. 1400 for both national and foreign students. Other rates apply to the special courses given in the English language.

Curriculum

The faculty, the Committee for Plans and Programmes of Postgraduate Education, and the Council of Postgraduate Education are responsible for the design and revision of the curricula. Research and active participation in training ensure that they relate to specifically defined tasks that the students should be able to perform on graduation.

Students in the Diploma in Public Health and Epidemiology course choose one area of specialization from among the following: health economics, management and planning in health services, or epidemiology. In the first semester the students take core subjects; in the second they study further compulsory subjects determined by their chosen specialization. The total number of hours of instruction varies from 230 to 288, depending on the option chosen.

Seminars, workshops, field visits and field practice are the main methods of instruction (occupying approximately 50% of the time); lectures, self-instructional material, and problem-solving are used to a lesser extent; simulation and role-playing a little. The institution makes arrangements with various urban and rural health centres and community development field training areas for the practical training of its students.

The management of health services based on primary health care is taught as part of general practice, occupational health, school medicine, and management and planning in health services.

Assessment of students

Methods of assessment consist of oral and written examinations, problem-solving exercises, and the observation of students in class and in the field. The students must also undertake projects and present a thesis. The final examinations are conducted by internal and external examiners.

Qualification

After having succeeded in the intermediate and final examinations, and presented a satisfactory thesis, candidates are awarded the Diploma in Public Health and Epidemiology. This qualification is not at present a requirement for employment in any post in Yugoslavia.

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic post-graduate public health degree/diploma course(s)*
Institut za stručno usavršavanje i specializaciju zdravstvenih radnika (Postgraduate Medical Institute) Nušićeva 25/1 BEOGRAD	1960	. .	. .	. .

Name and address	*Year public health course started*	*Academic year 1979–1980*		
		No. of teaching staff	*No. of students in all courses*	*No. of students in the basic public health degree/diploma course*
Škola narodnog zdravlja "Andrija Štampar" (G, I) **("Andrija Štampar" School of Public Health)** **Medical Faculty** **University of Zagreb** **Rockefellerova 4** **41000 Zagreb**	1947	43 ft 250 pt	N: 203 (72 m; 131 f) F: 5 m	N:38 (21 m; 17 f) F: 1 m

ANNEXES

Annex 1

SUBJECTS INCLUDED IN THE COURSES OFFERED AT THE INSTITUTIONS PROVIDING POSTGRADUATE EDUCATION IN PUBLIC HEALTH

The diversity of subjects included in the courses offered at the 216 schools of public health listed in this publication reflects the heterogeneity of the public health discipline itself and the way it is understood in relation to health needs in different national settings.

In spite of the diversity, an examination of the curricula indicates that certain subjects are taught with great frequency. At almost every institution the curriculum for the basic general public health course consists of both compulsory and elective subjects.

Compulsory subjects

Table 1 lists the subjects that most frequently constitute the core programme of compulsory subjects in the curriculum of the basic general public health course. The groups (1), (2), and (3) represent a decreasing frequency of inclusion as compulsory subjects. At some institutions the subjects that are compulsory may vary according to the type of post for which a student is undergoing training—for example, whether he expects to work at the provincial or the district level—or according to his academic background.

Many institutions also offer courses in the public health aspects of a specialized discipline, such as *occupational health, nutrition,* or *tropical medicine.* The curricula for these courses consist of different compulsory subjects according to the discipline being studied.

Elective subjects

A student in a basic general public health course is ordinarily expected to take a minimal number of elective subjects. Any of the 20 subjects listed in Table 1 that is not compulsory at a particular institution may be available as an elective subject, as may be a more advanced version of any of the 20. Such advanced subjects are sometimes taught in another department of the university.

Table 2 lists the additional subjects that are most frequently available as elective subjects. The groups (1), (2), and (3) represent a decreasing frequency of availability.

Table 1. Compulsory subjects

Most common title of the subject	Possible synonyms
(1)	
Basic sciences	
Biostatistics	Biometry; Statistics
Epidemiology[a]	
Microbiology	Bacteriology and parasitology
Applied disciplines	
Environmental sanitation	Environmental health; Environmental health and sanitation
Introduction to public health	History and philosophy of public health
Health education	
Organization of health services	
(2)	
Basic sciences	
Demography	
Social sciences and health	Medical sociology; Behavioural sciences; Social aspects of public health
Applied disciplines	
Food and nutrition	
Health care management	Health administration and management; Principles of management
Health planning[b]	
Maternal and child health services	
Occupational health	
(3)	
Basic sciences	
Health economics	
Health services research	Health care evaluation
Applied disciplines	
Community organization	
Family planning and population[c]	Population problems
Mental health services	
Primary health care[d]	

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[a] The focus may be on epidemiological methods of investigation, without taking into consideration disease control; or, particularly in developing countries, strategies for controlling communicable diseases may be included.

[b] May be combined with *evaluation* or *budgeting*.

[c] May be combined with *maternal health services*.

[d] A separate subject only in certain developing countries; more often taught in relation to another subject, such as *organization of health services*.

Table 2. Elective subjects

Most common title of the subject
(1)
Chronic disease epidemiology
Health law and legislation
Hospital administration
International and comparative health
Records and information systems
School health
Social security and social policy
Tropical medicine
(2)
Accident prevention
Computers and data processing
Genetics and public health
Gerontology
Health manpower development
Human relations and management
Public health nursing
Rehabilitation of the disabled
(3)
Air and water pollution
Dental health
Educational methods
Food hygiene
Hygiene of housing
Malaria control
Screening programmes
Tuberculosis control
Venereal disease control
Veterinary public health

Teaching/learning methodology

In the basic general public health course much use is made of methods outside the classroom. In addition to lectures, the following 3 teaching/learning methods are used at numerous institutions:

(1) The *general open-topic seminar*, during which diverse subjects are discussed, often with the participation of faculty members from various departments.

(2) The *dissertation*, *thesis*, or *essay*, prepared by a student on an assigned subject or one he has chosen himself. This is not a major dissertation, such as that for a doctoral degree, but a task that may reasonably be completed within a 1-year period of study.

(3) *Field practice*, for which a student is assigned to a community or an organization for a certain period of time—often 1 or 2 months. There he works under the supervision of an experienced public health specialist, sometimes examining a special problem and preparing a report on his findings. Some institutions have permanent administrative relationships with communities or organizations where student field assignments can be carried out.

Even during normal didactic courses special writing exercises may be incorporated, in addition to classroom lectures and discussion, based on a study of the literature or of a field situation.

Annex 2

NUMBERS OF INSTITUTIONS PROVIDING POSTGRADUATE EDUCATION IN PUBLIC HEALTH

Comparative List by Country[a]

Country	1965	1971	1985
Argentina	1	1	2
Australia	1	1	2
Bangladesh	—	—	1
Belgium	6	6	7
Benin	—	—	1
Brazil	3	2	2
Bulgaria	1	1	1
Burma	—	1	1
Canada	2	1	3
Chile	1	1	1
China	[2][b]	—	14
Colombia	1	1	1
Cuba	1	1	1
Czechoslovakia	2	2	2
Egypt	1	1	9
Ethiopia	—	—	1
France	1	1	9
Germany, Federal Republic of	3	2	2
Ghana	—	—	1
Greece	1	1	1
Hungary	—	1	1
India	7	8	36
Indonesia	1	1	1
Iran, Islamic Republic of	1	1	1
Ireland	1	1	1
Israel	1	1	1
Italy	—	21	22
Japan	1	1	1
Lebanon	1	1	1
Malaysia	—	—	1
Mexico	1	1	1
Netherlands	2	6	6
New Zealand	1	1	—
Nigeria	—	—	2
Pakistan	1	1	1
Peru	1	1	1

Country	1965	1971	1985
Philippines	1	1	1
Poland	1	1	1
Portugal	1	1	1
Republic of Korea	1	1	2
Romania	1	—	—
Singapore	1	1	1
Spain	1	1	1
Sudan	—	—	1
Sweden	1	1	1
Switzerland	—	—	1
Thailand	1	1	1
Turkey	1	2	15
Uganda	—	1	1
Union of Soviet Socialist Republics	16	13	15
United Kingdom of Great Britain and Northern Ireland	12	8	7
United Republic of Tanzania	—	—	1
United States of America	13	17	23
Venezuela	1	1	1
Viet Nam	—	—	1
Yugoslavia	2	2	2
TOTAL	100	121	216

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[a] Source: *World directory of schools of public health, 1965; World directory of schools of public health, 1971; World directory of schools of public health and postgraduate training programmes in public health, 1985.*

[b] Data refer to China (Province of Taiwan).

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130